Clinical Lecture

ON THE

CURATIVE INFLUENCE OF AN EXCLUSIVE MILK DIET IN SOME CASES OF INFLAMMATION OF THE BLADDER.

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GENTLEMEN,—In the wards of the hospital you have frequent opportunities of observing the beneficial influence of an exclusive milk diet in various forms of disease. You have seen some cases of chronic diarrhœa and dysentery rapidly and completely cured by this diet, without the aid of medicines. There is one such case now in No. 4 ward. E. J——, a sailor, aged twenty-five, who got acute dysentery at Calcutta in June last, was admitted Nov. 1st, suffering from abdominal pain and frequent watery, slimy, blood-tinged stools. He was placed on milk alone, at first with no medicine. Improvement began at once, and he is now, in less than a month, nearly convalescent. You have seen that the diarrhœa of typhoid fever is often promptly checked by omitting the beef-tea and eggs from the dietary, and feeding the patient for a few days upon milk alone. You have seen in numerous cases of acute Bright's disease (acute albuminuria) the speedy disappearance of the albuminuria under the influence of rest in bed, a few warm baths, and copious libations of milk. And not unfrequently you have seen that a too early addition of solid food to the dietary has been followed by the reappearance of albumen in the urine. A child now in Twining ward has afforded an instructive illustration of this principle:—

Caroline D——, aged five, was admitted on Sept. 14, with acute general dropsy, following scarlet fever, her urine being blood-tinged and nearly solid with albumen. She was ordered to have a wet sheet and blanket pack daily, as much cold or tepid milk as she would drink, no other food, and at first no medicine. She improved rapidly, the urine became copious, the dropsy disappeared, and at the end of a fortnight there was a mere trace of albumen in the urine. On the 16th of October the urine was free from albumen. She was then allowed to have fish in addition to milk, and on the following day there was again a trace of albumen, which continued until the 19th, when the fish was omitted and milk alone allowed. On the 23rd the urine was again free from albumen. Then she was ordered a slice of mutton daily; and a few days afterwards, on Oct. 30th, the urine was once more found to contain a trace of albumen. Again, therefore, she was restricted to a diet of milk alone; and the smallest possible trace of albumen is present even now (Nov. 27th); until this has entirely disappeared we shall restrict her to the exclusive milk diet.

It is impossible to overestimate the supreme importance of strict attention to diet in the treatment of all cases of albuminuria.

But I desire now to direct your attention especially to the beneficial influence of an exclusive milk diet in the treatment of some cases of cystitis. No case of this kind has occurred recently in my hospital practice, but within the last two years I have seen elsewhere several cases in which the curative influence of a milk diet had been very remarkable, and I propose now to give you a few particulars of three illustrative cases, taking them in the order in which they occurred.

Miss D——, aged seventeen, consulted me first on Jan. 22nd, 1875. The following history of the case was given in a letter from the patient's mother. "It was in March, 1874, that my daughter first noticed an irritability of the bladder, disturbing her many times in the day, and three or four times every night. In June she began to suffer pain, especially at night. She was treated by various medical men, but became daily worse, the water containing blood, pus, and albumen. On the 14th of October she was sounded for stone, and its absence proved, but all the symptoms became much aggravated. During the succeeding three months she suffered, at intervals varying from two to three days, severe attacks of pain over the bladder, lasting from two to five hours, during which she passed water every two, three, or five minutes. Very hot hip-baths and opium pills afforded temporary relief. I remarked that fish, and more especially oysters, as food, always brought on a severe attack of pain and irritation. On Jan. 22nd, 1875, being then seventeen, she came under your care." She was then suffering from severe pain over the bladder, and from very frequent and painful micturition, so that her life was rendered miserable. The urine was acid, and contained a considerable amount of pus. All the symptoms appeared to be the result of inflammation of the bladder, but her mother had been positively assured that there was disease of the kidneys. She had taken a great number and variety of drugs, but opiates alone had afforded any temporary relief. I advised a trial of an exclusively milk diet, warm hip-baths at night, and an occasional opiate draught, which she had been in the habit of taking for the relief of pain. She also took occasionally some pills containing camphor and extract of henbane. I saw the patient five times during the months of January, February, and March. During that time the milk diet was continued, and there was a gradual improvement. After March 22nd I did not see her or hear of her again until Sept. 12th, when I received a letter from her mother, in which she says: "I am sure you will be glad to hear that your young patient is now quite restored to health, and if on any day she does not feel quite so well, a return to *exclusive* milk diet for twenty-four hours makes all right again. She began your treatment in January, and although the improvement was very slow it was continuous. She spent the month of August at the seaside, bathed and swam without any ill-effects, and she is able now to resume all her old occupations. Her food is still principally milk and biscuit, plain meat once a day, very seldom some green vegetable, never tea, coffee, beer, or wine. I give you these details believing they will interest you; and because we have had to feel our way so cautiously in the matter of food." After receiving this letter I requested the writer to call on me with her daughter, and to bring me a specimen of my quondam patient's urine, which I found to be in every respect quite normal, while the young lady reported herself, and looked, in perfect health, and free from all local irritation.

Mr. C. B——, a country gentleman, aged forty-eight, consulted me on Oct. 13th, 1876, on account of frequent and painful micturition, which had troubled him for two years. He stated that two years ago he contracted a gonorrhœa, for which, at the commencement of the malady, he used an injection of zinc and morphia. This quickly stopped the discharge, but he then began to suffer from pain in the bladder and frequent calls to pass water, the urine being turbid with mucus, and for several weeks tinged with blood. The frequent painful micturition and turbid urine had continued to the present time. He generally has to pass water every hour both day and night. The pain and irritation are much increased by walking and driving, so that in going about he has to wear an india-rubber urinal. The urine brought to me was turbid with puriform mucus, of normal density, of acid reaction, and deposited some red sand. It was slightly coagulable by heat and acid, the albumen being probably derived from the pus; no tube-casts were present. He had consulted two eminent London surgeons, one of whom had sounded him for stone with a negative result; but the prostate was said to be enlarged. The symptoms had continued unabated, notwithstanding the various remedies which had been employed, temporary relief only having been obtained by the use of opium suppositories. Up to the time of his first visit to me he had continued to take wine at his meals rather liberally.

I advised him to take cold or tepid raw milk exclusively—no other food or drink,—and I prescribed no medicine. He returned to his home in Yorkshire on the day after his visit to me, and a few days afterwards I received from him the following report, dated Oct. 20th:—

"I consulted you on Friday, the 13th October. I returned home on Saturday, the 14th, and since the middle of that day I have taken nothing but milk, neither solid nor liquid, as you prescribed. From the very beginning of this diet—

that is, from the morning of Sunday, the 15th—I have felt no traces of the inflammation. It has been difficult for me to realise its sudden and (for the time) total disappearance. I twice yesterday drove three miles at a time in a common cab without pain or disturbance. Up to the 14th the irritability had been as bad as ever, and on the afternoon of the 13th I had been in very severe pain while driving a short distance in London. I write to ask how long I ought to continue the milk diet if the irritability does not return. The water is clear, but still leaves a slight cloud after standing in a glass bottle. I am in no hurry, and will follow your instructions strictly. I shall be glad to be liberated from the milk diet, but I prefer it to the inflammation." In a letter dated Oct. 22nd he says: "The necessity for making water very frequently (about once an hour) ceased along with the inflammation or irritability. I have since made water in the daytime at irregular intervals, but scarcely, if at all, more frequently than when in good health. Yesterday I walked three miles, and sat down for an hour at the end of the walk, without having to make water, and to-day I have also taken a fair amount of walking exercise without any uneasiness. After the length of time that I have been practically a cripple, this seems only too good to last." On the 23rd I received by rail a sample of his urine, which deposited only a scanty sediment of mucus, and contained no albumen. I then advised him by letter, while still abstaining from alcoholic liquors, to take in addition to his milk some plain solid food—fish, game, chicken, or mutton,—with some cooked vegetables, and for breakfast an egg with bread-and-butter. On Oct. 27th, exactly a fortnight after his first visit, he called and reported himself quite well. He had been four hours and a half in the train the day before without having once to pass water; he can hardly realise the fact that he is free from all discomfort. The urine is as clear as sherry, and entirely free from mucus. He returned home, and I received from him a note, dated Nov. 6th, in which he says: "Until last Friday, the 4th, I continued to abstain from all alcoholic liquors, as you advised. On and since that day I have drunk wine at dinner only, as usual. This has had no bad effect to my knowledge, and I find myself at present perfectly well." He ends with an expression of thankfulness for the benefit derived from the treatment.

I have seen a considerable number of cases of rapid recovery from *recent acute cystitis*, where the disease has been promptly and judiciously treated, but I never before saw so rapid and complete a cure of severe cystitis of *two years' duration* as occurred in this case. The result surprised and gratified me almost as much as it did the patient. The *modus operandi* of the milk is sufficiently obvious. The urine is largely diluted with water, and rendered mild and unirritating by the digestible nature of the food; the bladder, therefore, being comparatively undisturbed by its contents, reverts to its normal condition, the inflammation of the mucous membrane subsides, and the morbid secretion of puriform mucus ceases.

The Rev. J. W——, aged twenty-nine, a curate in a manufacturing town, consulted me on Nov. 2nd on account of frequent micturition and a painful feeling of irritation extending from the bladder to the end of the penis. He passes water almost every hour. These symptoms have troubled him for the last three months. He has a weak stomach, and he believes that his bladder trouble was excited by his having drunk one night two glasses of beer at supper. The urine was acid, turbid with pus, and slightly coagulable by heat and acid. I advised him to try a diet of milk exclusively, and to take no medicine.

Four days afterwards, on Nov. 6th, he called and said that he had been taking a gallon of milk daily, and that since the second day the feeling of irritation and the frequent calls to pass urine had ceased.

Nov. 10th.—He has taken, in addition to milk, mutton, chicken, and rice. There has been no return of irritation, and he feels quite well. The urine is much less turbid, but it still deposits a slight cloud of mucus. He was to return to his work on the following day.

On Nov. 23rd he sent me a specimen of urine, which I found entirely free from mucus and in every respect quite normal; and in a letter dated Nov. 24th he says, "My health is, I think, better now than it has been for many months past, and my bladder does not seem to be affected in the slightest degree."

Perhaps a few hints as to the mode of giving milk in these cases may be useful. The milk may be taken cold or tepid, and not more than a pint at a time, lest a large mass of curd, difficult of digestion, form and collect in the stomach. Some adults will take as much as a gallon in the twenty-four hours. With some persons the milk is found to agree better after it has been boiled, and then taken either cold or tepid. If the milk be rich in cream, and if the cream disagree, causing heartburn, headache, diarrhœa, or other symptoms of dyspepsia, the cream may be partially removed by skimming. One reason amongst others for giving the milk, as a rule, unskimmed—that is, with the cream,—is that constipation, which is one of the most frequent and troublesome results of an exclusively milk diet, is to some extent obviated by the cream in the unskimmed milk. As a rule, it is unnecessary, and, therefore, undesirable, to add bread or any other form of farinaceous food to the milk, which in itself contains all the elements required for the nutrition of the body. When the vesical irritation and catarrh have passed away and the urine has regained its natural character, solid food may be combined with the milk, and thus a gradual return may be made to the ordinary diet, while the effect upon the urine and the bladder is carefully watched.

There are some patients with whom, unfortunately, milk in any form, and even in small quantities, so decidedly disagrees that it is for them as unsuitable a diet as any other form of indigestible food would be.

If I might venture to give a hint to my surgical colleagues and friends, I should say that an exclusively milk diet would probably be found very suitable, for most patients, during the first few days after the operation of lithotrity, the object being of course to lessen, as much as possible, the inflammation and catarrh resulting from the mechanical irritation of the mucous membrane of the bladder.

I have recently seen two cases in which the vesical irritation and catarrh resulting from a stone in the bladder were much mitigated by the milk diet, the patients being thereby brought into a more favourable condition to undergo successfully, the one the operation of lithotomy, the other that of lithotrity.

THE

EFFECT OF PROLONGED MUSCULAR EXERCISE UPON THE URINE IN RELATION TO THE SOURCE OF MUSCULAR POWER.

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(*Continued from p.* 813.)

As the main object of my investigation was the elucidation of the question of the source of muscular power, I will first direct attention to the results bearing on the elimination of nitrogen. There will be other points connected with the effect of muscular exercise upon other constituents of the urine that will afterwards merit consideration.

In the upper part of the table (*ante*, pp. 816 and 817) the daily amounts of urea and uric acid excreted are shown. The figures for the nitrogen which are seen lower down have been obtained by calculation from the urea and uric acid taken together. Urea contains seven-fifteenths and uric acid one-third of their weight of nitrogen; therefore, multiplying by seven-fifteenths, or ·4666, gives the amount of nitrogen in urea, and by one-third that in uric acid. As has been before remarked, several actual nitrogen determinations were made by combustion-analysis to ascertain whether the figures yielded by calculation from the urea and uric acid correctly represented the nitrogen eliminated, and this they were found to do within a close approximation. As the nitrogen is the agent upon which the argument will be based, to avoid complicating the discussion, reference will only be made to this element, the urea and uric acid being simply regarded as a medium for furnishing the amount eliminated.

The first fact which strikes the mind, on carrying the eye along the line of figures in the table showing the daily elimination of nitrogen, is that, without exception, the

amount during the days of walking greatly exceeds that during the days of rest. Taking the results derived from both Perkins and Weston, there are twelve days of walking, and the average daily elimination amounts to 527·96 grains, against 305·42 grains which stands as the average for the fifteen days of rest. Such are the averages, and it is interesting to observe that in no case is there any very wide departure from them in the separate amounts under the respective heads.

The nitrogen ingested is also greater, though not to the same extent, during the days of walking than during those of rest. The twelve walking days give a daily average of 556·79 grains of nitrogen supplied by the food. There are two days—viz., those belonging to Weston's forty-eight hours' walk—upon which the ingested nitrogen stands very low (65·68 grains in the one, and 161·72 grains in the other), and if it were not for this, the average, it may be incidentally mentioned, would stand considerably higher. For instance, if these two days are for the moment excluded, and the average drawn from the remaining ten, it rises to 645·41 grains, or nearly 90 grains per diem more. The nine days of rest for which the ingested nitrogen has been calculated show a daily average of 487·94 grains.

We have, then, before us the fact that the nitrogen eliminated during the days of walking is considerably greater than that eliminated during the days of rest. There is also a difference in the same direction, although not in a corresponding ratio, in the nitrogen ingested. The average daily excess in the nitrogen eliminated during walking, as compared with that eliminated during rest, is 222·54 grains. The rise in the nitrogen ingested is from 487·94 to 556·79, a difference of 68·85 grains; but, as I have pointed out, there are two days belonging to the walking period when the nitrogen ingested was exceptionally low, and if the average be taken for the days exclusive of these two, the daily average of nitrogen ingested during walking becomes 157·47 grains in excess of that for the days of rest, a difference which is not so extremely removed from that existing on the side of the nitrogen eliminated. I simply make this remark without desiring to lay more stress upon it than it deserves. Under any way of looking at the figures it is evident that we have an increased elimination of nitrogen to deal with during the days of walking, which is not to be accounted for by the nitrogen ingested. We can only, therefore, refer this increase to the effect of the exercise; but is it the result—is it the expression of the action which has given rise to the power evolved? This is the question that presents itself for solution, and I will attempt to solve it by ascertaining whether the force liberated by the oxidation of muscular tissue corresponding with the nitrogen discharged is sufficient to account for the work performed.

In order that my design may be carried out we must estimate in figures the force producible on the one hand, and that expended on the other; and for this we have the following data to proceed upon.

As regards the force producible by the occurrence of oxidation, the information at our command enables us to frame a precise representation. The amount of heat evolved has been experimentally determined by Professor Frankland through the agency of the calorimeter; and, with the aid of the formula of Mr. Joule, a given amount of heat is convertible by calculation into its equivalent of working power. Thus regarded, the dynamic or mechanical work-value of one ounce (437·5 grains) of dry albuminous matter, *as consumed within the body*, is found to be equivalent to 165·20 foot-tons, which means the power required to raise the specified number of tons one foot high. I have said "as consumed within the body," for it is this mode of consumption or oxidation which necessarily has to be taken into account in our calculations; and in the case of nitrogenous matter the liberated force differs from the complete oxidation value, as a portion of the carbon and hydrogen of the compound passes out of the system in an unoxidised state under the form of urea, and thus carries off a certain amount of unevolved power.

The nitrogenous matter of muscular tissue is so closely analogous in chemical composition to albumen that its force-value, under oxidation, may be taken as the same, and, from the amount of nitrogen escaping with the urine, we can determine the amount of nitrogenous matter which has undergone disintegration in the system. Mulder's analysis, for instance, gives 15·5 as the percentage of nitrogen in dry albuminous matter. For every 100 grains, therefore, of albuminous or nitrogenous matter disintegrated or consumed there will be 15·5 grains of nitrogen yielded for elimination with the urine. This is equivalent to saying that one grain of eliminated nitrogen is the representative of 6·45 grains of disintegrated nitrogenous matter. Now, if 437·5 grains (one ounce) of albuminous matter, when consumed in the body, give rise to the evolution of power equivalent to to 165·20 foot-tons, 6·45 grains, which correspond with one grain of eliminated nitrogen, will give rise to 2·4355 foot-tons. We thus get 2·4355 foot-tons as the dynamic representative of each grain of urinary nitrogen, and by a simple calculation from the nitrogen eliminated we can express the working power derivable from the nitrogenous matter which has undergone disintegration in the system.

In this way, then, we obtain, by what may be considered a well-founded scientific process, a knowledge of the work-value of the nitrogenous matter undergoing disintegration in the system. In the first place, the nitrogen excreted with the urine indicates the amount of nitrogenous matter destroyed; and in the second, this being known, the data at our command enable us to frame an expression of the amount of work derivable therefrom. We have here one side of the question appertaining to the problem to be solved. The other side consists of the work actually performed in carrying the body over the distance walked. The amount of this being ascertained, a comparison will show whether the force producible from the nitrogenous matter consumed is adequate to account for the work accomplished.

According to Professor Haughton, the force expended in walking on level ground may be estimated as equal to that required to raise one-twentieth of the weight of the body through the distance traversed. The number of miles walked being brought into feet, multiplying by one-twentieth of the weight of the body represented in pounds, will give the work in foot-pounds; but, as so extensive a series of figures has here to be dealt with, it is convenient to reduce the result to foot-tons.

Such is the manner in which the figures representing the measure of work achievable and accomplished in the table,

	Weight of pedestrian in lbs.	Distance walked in miles.	Work performed, represented in foot-tons.	Force-value in foot tons of nitrogenous matter equivalent to the total urinary nitrogen eliminated.	Force-value in foot-tons of nitrogenous matter equivalent to the nitrogen eliminated in excess of the average during rest.
Perkins' 24 hours' walk	137	65½	1057·59	1462·83	718·98
First 24 hours of Weston's 48 hours' walk	137¾	100	1623·48	1341·83	597·98
Second do. do.	133	80½	1261·83	1124·15	380·30
First 24 hours of Weston's 75 hours' walk	137	104	1679·23	1208·52	464·67
Second do. do.	135	76	1209·21	1373·13	629·28
Third do. do.	134	83	1310·80	1298·39	554·53
First 24 hours of Weston's 6 days' walk	134¼	96	1525·30	1277·63	533·78
Second do. do.	132½	77	1205·27	1418·48	674·63
Third do. do.	132⅛	70½	1097·29	1462·00	718·15
Fourth do. do.	132⅝	76½	1195·19	1225·56	481·71
Fifth do. do.	131¼	67	1035·44	1036·12	352·27
Sixth do. do.	130⅝	63	967·57	1141·51	507·66

have been obtained, and I will now refer to the conclusions to be drawn from them.

Above are the figures concerned placed together in a

tabulated form. In one column is the weight of the pedestrian; in the next the distance walked; and then follow the measure of work to which these two factors correspond, the work-value of the nitrogenous matter equivalent to the total urinary nitrogen eliminated, and, lastly, the work-value of the nitrogenous matter equivalent to the urinary nitrogen excreted in excess of the average for the total days of rest. I consider that this is the column which ought to be followed, for it is clearly this which represents the disintegrated nitrogenous matter arising from the walk performed. For instance, during the days of rest there was a certain amount of disintegration of nitrogenous matter occurring as a result of the internal operations going on in the system. The disintegrated nitrogenous matter thus resulting, taking the average of all the days (15) of rest, corresponded with 305·42 grains of eliminated nitrogen. It may be fairly assumed that the same, or about the same, disintegration would ensue during the days of the walk, and independently of the effects of the walk. To represent, therefore, the disintegration occurring as a result of the walk, we ought strictly to deduct that which the data show would have occurred without it.

The above figures speak for themselves. A glance at them is sufficient to show that the force obtainable from the nitrogenous matter disintegrated is totally inadequate to supply the power for the work performed. In every case the force-value of the nitrogenous matter standing in excess of that disintegrated according to the average for the days of rest, and representing, it may be considered, the effect of the exercise, falls very far short of the power expended in walking. Upon only four occasions does it amount to more than half, and upon two it is less than a third. Even in five out of the twelve days the force-value of the total nitrogenous matter disintegrated is below the force employed. Taking the sum-totals and the daily averages, the figures stand thus:—

—	Work performed represented in foot-tons.	Force-value in foot-tons of nitrogenous matter equivalent to the total nitrogen eliminated.	Force-value in foot-tons of nitrogenous matter equivalent to the nitrogen eliminated in excess of the average during rest.
Sum-total for the twelve days ...	15168·20	15430·15	6503·94
Daily average ...	1264·01	1285·84	541·99

I have been arguing as though the nitrogenous matter disintegrated represented muscular tissue oxidised. This, however, is undoubtedly by no means the case. There can be no question, from what we know upon the subject, that a large, if not the chief, portion of the urinary nitrogen eliminated is derived directly from the metamorphosis of the nitrogenous matter ingested without passing through muscular tissue. Again, I have only taken into account the power expended in the mere act of getting over the distance walked. I have said nothing of the muscular power expended in maintaining the circulation and respiration, and the movements of the body occurring during walking, supplementary to those actually concerned in effecting passage over the ground. These must form an item of considerable significance in relation to the whole muscular action taking place, and serve to bring out more strikingly the conclusion suggested by the figures which have been furnished.

(To be continued.)

UNIVERSITY OF EDINBURGH.—The matriculation for the session 1876-7 shows a large increase over that of past years, and now has reached the highest number that has been registered on the books of the University at any time since its foundation. An analysis of the register shows that of the 2069 already matriculated for the current session, 1434 come from different parts of Scotland, 370 from England and Wales, 30 from Ireland, 71 from India, 127 from different colonies, and 37 from foreign countries. Of the 828 students already registered in the Medical Faculty 353 are from Scotland, 291 from England and Wales, 21 from India, 95 from the colonies, and 20 from foreign countries.

NOTES ON A CASE OF EMPYEMA, FOLLOWING PLEURO-PNEUMONIA, TREATED BY ASPIRATION.

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(*Reported by* JAMES BLAKENEY DREW, Surgeon R.N.)

S. S——, aged sixteen, boy, was admitted a patient to the Royal Naval Hospital, Plymouth, on June 26th, for the treatment of pleuro-pneumonia of the sthenic type, affecting the left lung. He continued to progress favourably until the morning of the 6th July, when he complained of increased difficulty of breathing, considerable præcordial distress, and rigors. The temperature and pulse, which hitherto had been high, now suddenly fell, the former being almost of the normal standard. On the morning of the 7th he was free from pain; the temperature being 98°, and the pulse 88; the only distressing symptom complained of being difficulty of breathing. On the evening of the same day there was a rapid and sudden rise of temperature and pulse, with a return of the præcordial distress and great difficulty of breathing. He passed a very restless night, and awoke from his short and fitful sleep with a sense of suffocation and impending dissolution. On the morning of the 8th the temperature was 97°; pulse 82, weak; breathing short and spasmodic; countenance livid; extremities cold; and the whole appearance of the patient indicative of profound collapse. There was bulging of the left intercostal spaces, and the heart's movements were directed towards the right side, with marked epigastric pulsation. The aspirator needle was now introduced in the anterior axillary line between the seventh and eighth ribs, and 144 ounces of fluid drawn off, which, under the microscope, gave the characters of pure pus. The needle was then withdrawn owing to the patient being seized with a violent fit of coughing, and the aperture carefully closed. Immediate relief from the difficulty of breathing and præcordial distress followed the operation, and one hour afterwards, the patient, having taken some nourishment, went into a sound sleep. During the afternoon the respiration varied from 32 to 36; the pulse was 96; and the temperature varied from 100° to 101·4°. On the morning of the 9th he felt much better; the temperature was 98·4°; pulse 90; respiration 30; and the heart's action normal. On the morning of the 10th the temperature was 98°; pulse 88; respiration 30; complete dulness over left side; epigastric pulsation again present. On the morning of the 11th the temperature was 100°; pulse 108; respiration 30; with loss of heart's sounds over the left side, which were distinct on the right. The aspirator needle was a second time introduced, and thirty-four ounces of fluid, with the characters described above, drawn off. Two hours afterwards the temperature and pulse had fallen considerably, and the patient felt relieved.

From this time until the end of July he continued to improve, and, with the exception of a slight evening rise of temperature and pulse, no unfavourable symptom presented itself, and the heart's sounds gradually became distinct on the injured side. The patient progressed thus favourably until the morning of the 5th August, when the temperature again became high. He now complained of pain over the entire of the left lung, and the heart's sounds became less distinct on that side. On the 7th the apex beat could be discerned directed towards the right side of sternum, and on the morning of the 9th he complained of being unable to lie on his right side, owing to the pain caused by so doing, which he referred to the centre of the sternum. There was now an evening rise of temperature, which continued until the afternoon of the 16th August, when it became normal, but the heart remained displaced, and he was unable to rest on the right side. On the morning of the 18th August, the operation of aspiration was repeated, close to the seat of the former punctures, and twenty-five ounces of purulent fluid were drawn away. From this time forward he rapidly gained strength, the temperature remained normal, the crepitus redux and respiratory murmur gradually returned over entire lung surface, and the heart again became *in situ*.

The patient was discharged from the hospital cured on the 14th November, with but slight deformity of chest.

Remarks.—This case is interesting from the large amount of pus taken away, total absence of shock, immediate relief, and ultimate good recovery, almost without any deformity.

IDEATION IN UTERO.

(A SUGGESTION.)

BY J. MORTIMER GRANVILLE, M.D., F.G.S., F.S.S. &c.

I BEG to offer the following suggestion for what I conceive to be a new or extended theory of *ideation*. If, after due consideration, it is accepted, I venture to think it will be found to throw light on certain mysterious phenomena which have not, so far as I am aware, been satisfactorily accounted for or explained.

Ideation, employing that term in its widest sense to include the possession of all conceptions or mental images, however formed, may be passive or active. The idea, *εἴδωλον*, may be received by impression or constructed by thought. That this distinction is not imaginary, and that the two processes produce different classes of ideas, may be inferred from the following considerations. It is a common experience to see an object, such as a building, a landscape, or a person, without consciously bestowing much attention on details, and subsequently to recall the mental picture and subject it to close scrutiny. In this way we discover minute features and peculiarities of ornament, form, and colour, expression or clothes, which not only were unnoticed at the time, but could not possibly have been worked out by any process of "unconscious cerebration," because, unlike those chains of reasoning which are supposed to be wrought by the mind without the cognisance of the will, there were no connecting links between the facts or features recalled. For example, there is no reason a particular portion of a building should have borne a special kind of ornament, and nothing, therefore, to lead up to the fact. It surprises us to "remember" that it was so decorated; yet, calling up the image or idea impressed on the mind, the circumstance is recognised. In the same way it is *re-collected* that in a certain part of some landscape there was a peculiar object, or the passing figure of a person, who attracted no attention at the time is, on recall and more careful examination, found to have been clothed in a particular dress.

Take another illustration. A man is heard to speak, but it is not known what he said. The general intonation may be recalled, and the component sounds re-examined to discover the words. In ordinary reading an analogous process occurs: not unfrequently a line—sometimes more—is mentally photographed, and the words deciphered afterwards. In very rapid reading this is commonly done, but perhaps the picture lingers on the retina. I am speaking of cases in which there is an interval between the sight of the book or placard and the attempt to read it. Persons with a good ear for music can carry away a tune and work out the notation at leisure. Neither of these examples offers a complete illustration of my hypothesis, because the active mingles with the passive, but a little reflection will suffice to show that these two processes—passive *reception* and active *conception*—are essentially distinct. In the passive, the idea is projected on to the mind as the rays of light pass from an object through a lens to the sensitive surface of a collodion plate. The impression may be instantaneous, the image is permanent, and the *idea* may be examined or excogitated at will. I do not assert that no such process as unconscious cerebration exists; the evidence seems to be strongly in favour of the received hypothesis, but I think much that is explained by it may be more easily and fully accounted for on the assumption that ideas are sometimes unconsciously impressed, often without full comprehension; that they lie dormant in the mind, and being recalled at leisure or when the faculties are in a more healthy condition, what previously appeared obscure seems plain, not because it has been worked out unconsciously in the interval, but because it is examined with powers of mental vision clearer or less preoccupied than before.

This brings me directly to the point I am chiefly concerned to submit for consideration. Everyone must, at some time, have experienced that extraordinary sensation which has been held to constitute subjective evidence of a previous existence—the feeling that a particular locality has been visited, a scene witnessed, a sound heard, or an act performed, before; when, as a matter of fact, there could not possibly have been a previous experience in the life of the individual to account for the sense of repetition. In explanation of this sensation I submit that *passive ideation*, or the reception of mental impressions, which are fixed as images in the mind, proceeds *in utero*, and that the original idea indistinctly present to the mind, and giving rise to the sense of repetition, is, in fact, a maternal idea reflected in upon the fœtal brain, and there fixed. Having thus concisely stated the theory, let me try to meet the preliminary objections which will be urged.

First, it will be asked, Is the brain of the fœtus *in utero* sufficiently developed to receive any impression? To this I reply, a child born in the ninth or tenth month will be little, if at all, less susceptible of external impressions operating through the special senses two or three months after birth than one of the same world-age born at full time. The accident of birth, therefore, does not affect the evolution of the cerebrum. If birth occurs in the eighth, ninth, or tenth month, it finds the brain capable of performing the simpler functions, or susceptible of the education necessary to develop the faculty of ideation. I contend, therefore, that during at least six weeks or two months of the ordinary period of life *in utero* the brain is susceptible of passive ideation, or the reception of impressed ideas. I will go one step further, and urge that it would be unreasonable to suppose the cerebrum remained inactive, when the other organs are all in more or less full operation, and nearly-related portions of the cranial mass so active as to produce concerted muscular contractions and automatic movements, as in the act of "jumping," even though it be assumed (arbitratrarily, as I believe) that the exciting force acts reflexly.

Secondly, is it conceivable that a transitory impression made on the mind of the mother should so modify the nutrition of the child's brain as to print its image, however faintly? It is not a question of the time occupied by an impression, but of the strength of its impulse, if I may so say. Instantaneous fright will, we know, so alter nutrition as to affect the structure of the child. A prolonged thought or anxiety will produce the same effect. The books are full of cases of this class. It seems probable that while, under exceptional circumstances a child may, in after years, exhibit tokens of special dislike, or dread, of a particular animal by which the mother has been frightened in the latter months of pregnancy, the scenes and actions that impress the mind with having been witnessed or performed before, are for the most part of a nature which makes it likely the impression was either deeply engraved or repeatedly forced, upon the mind of the mother. If it be granted that a maternal impression may be reflected in upon the mind-organ of the unborn, but living, child, no great difficulty will be felt in understanding how a brief impression may be fixed if sufficiently strong, or a slighter idea sink in if continuously reflected.

Thirdly, does anything of the kind occur in after life? I have already suggested that passive ideation is frequently if not habitually experienced. As a matter of fact, though the proof would be difficult, I believe the larger proportion of the ideas received by children are acquired by this passive process, and if the method of reception were employed as a means of education, little minds might unconsciously be so stored with information that when "opened," as the phrase goes, they would be found to contain the bulk of such knowledge as children *intelligently* educated are infinitely troubled to gain.

Fourthly, the special senses are supposed to be the necessary agents of ideation. That is, in a measure, true. I am careful to qualify the admission, because the phenomenon of spectre-ideas, or "ghosts"—in which a mental so resembles the visual image as to be mistaken for the eye-picture of an external object—proves that the special senses are not indispensable, at least in morbid ideation. The doctrine *Nihil est in intellectu quod non erat in sensu* is untenable.

Delusions of sight, hearing, and special sensation generally are ideas produced without the agency of the special organs of sense. In dreams, again, the optical organ is incapable of acting, light being excluded, and the eyelid fallen. The mind-picture, *εἰδωλοποίησις*, is created internally—perhaps composed of fragmentary reminiscences—a mental Frankenstein; and it is probable the picture so produced is identical in nature with that commonly presented to the consciousness in response to a stimulus applied from without. In a word, it is a mental image the mind sees, whether conjured up by its own faculty of specific ideation, or reflected from without. However that may be, the intervention of the special senses is not necessary for passive ideation, according to my theory, the subjective process being purely internal, as I will presently submit. Let me only remark here, in passing, that it is in exact accord with my notion that we find the various forms of "ideational insanity" are more commonly transmitted from parent to child through the mother, while those varieties of hereditary disease which are more directly dependent on structural peculiarity are passed down with equal or even greater frequency from the father.

I have been asked if it would not be more correct to say that the fœtal brain is prepared for ideation by the creation of susceptibilities? My answer is this: The only way a specific susceptibility to a particular impression can be produced is by the impression itself. "A burnt child dreads the fire" because the susceptibility to a painful impression of fear has been created by the impression of injury. If a child is born with a particular dread or aversion, an impression of injury or danger must have caused that susceptibility. The specific character of the fear is, I think, in itself a strong proof of the particular impression to which the mind is especially sensitive having been applied, just as the image left on wax proves that a particular seal has been impressed, by precisely fitting the mould. In so far as the theory of susceptibility implies that an impression has been reflected in upon the fœtal mind-organ from the maternal brain I accept it, but no further. It is a real, though passive, ideation my theory supposes, not a mere modification of structure creating a susceptibility to special kinds of sensation subsequently, for the first time, applied.

It is admitted by all physiologists that the mother exerts, or may under certain conditions exercise, a controlling influence over the progress of fœtal development. There is no room for difference of opinion on this point. A strong maternal impression may affect the child. The theory that a structural change is produced offers fully as many and great difficulties as that which supposes an idea is impressed. In the oviparous animal the formative force or energy is, of course, embodied in the egg. After extrusion from the oviduct, the ovum is so completely self-contained that it may be taken away and hatched by the heat of another animal body or an artificial apparatus indifferently, and the developmental process will proceed under either set of conditions, and produces the *transmitted* peculiarities of the bird. The circumstance that in the viviparous animal the ovum is not deposited outside the body, but *normally* received into a special apparatus, the uterus, where it can be fed with material for growth, does not affect the essential principle of the method either of development or of *transmission*. This is proved by the curious fact that the fertilised ovum may attach itself almost anywhere, in the uterus, in the Fallopian tube, in the interstitial structure of the organ; and, provided only it can establish an arterial connexion with the mother—not, as we know, direct, but under conditions in which the endosmotic process may be carried on between the fœtal and maternal blood—the new organism will live and develop. How, then, does the mother exert the influence which it is admitted she can and does exert? The maternal organism of the viviparous animal is as independent of the mother with which it is still connected—simply and solely for the purpose of food-supply—as the ovum of the oviparous animal, which is self-contained and therefore cast out. The formative force is embodied in each ovum; and the two, so far as that force is concerned, are similarly conditioned. It is only in respect of the method of food-supply they differ. I repeat this because I am especially anxious to make it clear. It follows, I think, that there can be only one channel of communication between the mother and the fœtus during the period of gestation, and that is the food-supply, or, blood. Any influence, therefore, which the mother exerts over the child, whether it be to modify structure or impress susceptibilities, must be exerted, through the medium of the material supplied from the maternal blood bathing the placental villi, by the physical process of absorption, or the incretive action of the peripheral cells of the placental tufts. There is certainly no special nervous connexion through which the maternal forces can act. The original formative forces derived from the mother and father are all embodied in the ovum when it is fertilised. This being conceded, I may proceed.

How is the maternal impression or idea passed in to the fœtal mind-organ? I suggest, through the blood. There is, as I have observed, no nervous connexion between the mind-organ of the mother and that of the child, nor do I think it would strengthen my position if such a channel of communication could be made out. The blood has always more to do with ideation than the nervous influences. When the blood is poisoned with foreign matters this function of the cerebrum is not only disturbed, but so perverted that, besides being either exalted or depressed, it takes on new forms of action. A phantasmagoria is produced which is so far independent of consciousness that a man may intelligently describe the pictures passing before his "mind's eye" with all the distinctness of a visual image, and will discuss the nature of the delusion, fully recognising its illusory character. The phenomena of delirium produced by fever-poison circulating in the blood, by poisoning with alcohol, as in delirium tremens, or with drugs, such as hyoscyamus and opium, are worthy of close attention. It might be contended that the production of picture delirium by depravation of the nutrient fluid in starvation or extreme thirst, and, sometimes, by mere loss of blood, as in hæmorrhage, tends to show that ideation is simply an active process of brain-work, and the phenomena of disturbance depend upon greater or less activity of the organ. This reasoning is barred by the circumstance that the mind-organ does not produce the imagery of delirium in any normal grade of energy. A healthy brain may be worked at any pressure from the zero of imbecile inertia to the verge of exhaustion, and disordered ideation will not be produced. If, however, in place of a general stimulant, possibly purely mental, a drug-like hyoscyamus or opium is exhibited in suitable quantity, disordered ideation almost immediately occurs; and, what is even more significant, the imagery or train of ideas produced will be characteristic of the drug, not of the accustomed methods or objects of thought pursued by the particular brain. If the ideation were in the brain, there should surely be simple multiplication and confusion of its own class of ideas. In the states of which I am speaking this is not the fact. A new train of ideas is imported—the opium train, the hyoscyamus class, and so on.

I think anyone who will take the trouble to study the phenomena must coincide in the conclusion that ideas may be communicated through the blood. Those who have had much opportunity of observing the symptoms and characteristic course of what is arbitrarily called "mental disease," but is, in fact, physical disease—or disorder—with mind symptoms, will not have failed to recognise the peculiar forms of delusion and hallucination prevalent among the half-starved and "worried" poor. The brains of these people have seldom been properly developed; they are like lungs with congenital atelectasis. Nutrition is defective, and insanity of the ideational type supervenes. The administration of a suitably nitrogenous diet usually suffices, with the cessation of worry, to effect a cure. There is no organic disease; the malady is purely in the blood; and if transfusion should ever be reduced to a simple and safe process, these cases may possibly be curable at a sitting by the rectification of the original fault. How readily the blood responds to the mental condition, and with what rapidity it may influence the state of mind, will appear from two familar illustrations. 1. The well-known effects of mental anxiety in the mother on the child during lactation. In this case the influence is exerted through the secreted milk; in that of a fœtus *in utero* the influence would be exercised by the blood of the mother more directly on that of the child. 2. The "temper-disease," described by the late Marshall Hall as dependent upon the exhaustion of nutrient material just before a meal, or some times permanent depravation from defective food or disordered digestion. In neither of these instances is there any diminution of the quantity of the blood. The effect produced

is undoubtedly dependent upon some change in, or re-arrangement of, its constituent elements. What happens exceptionally under special circumstances may, and, as a matter of fact, does, I submit, occur as the medium of passive ideation, transmitted to, or reflected upon, the fœtus *in utero*.

If I am right in my conjectures, certain mysteries may yet be explained. Active tendencies, dispositions, and even lines or methods of reasoning and conduct, not easily explained on the strained hypothesis of structural peculiarity, will be intelligible even in the case of children removed from the mother immediately after birth, and, therefore, not induced or inculcated by example and the educational influence of an associated and stronger mind. It will be more readily seen how by elevating the individual the stock may be improved. The perplexing feeling of having seen and done things before will be understood. And those strange cases, well authenticated and not to be gainsaid, in which children describe or recognise places they cannot have seen previously, but with which the mother is familiar, will receive a satisfactory explanation. It must be distinctly remembered that my theory goes far beyond the mere creation of susceptibilities or the general formative control of the mother over the fœtus *in utero*. This last hypothesis is as old as the story of Jacob's striped lambs, and the evidence on which it rests has been continually accumulating. I submit that ideation is passive as well as active, that while, of course, the fœtus and the young child are alike incapable of *thinking*, they may receive ideas impressed upon their mind-organs either through the special senses, or, in the case of the fœtus *in utero*, through the blood—in the same way, the only way, by which formative influences can be transmitted from mother to child during the period of gestation. I simply suggest these hypotheses as thought-out chains of reasoning that I have tried to test link by link, and which seem to me strong enough to justify their submission to the scrutiny of physiologists, by whose more practical judgment the conjectures of the psychologist must always be corrected.

DISLOCATION OF THE NECK FROM A BLOW.

BY CHARLES ORTON, L.R.C.P. EDIN.

THIS case I consider to be of some interest, not only on account of the rarity of the accident itself, but also of the cause of the accident, which was from a blow by a man's fist. The case was sent for trial at the Stafford Assizes, and the man who struck the blow, pleading guilty, was sentenced to twelve months' hard labour.

I did not see the deceased until five hours after death, when I made the post-mortem examination.

The eye-witnesses describe him as stooping forwards, with the chin slightly turned to the left. The blow was delivered under the right angle of the jaw by the right-hand fist, partially from behind, and partially sideways, to the deceased, who fell towards the left, but backwards, and "seemed dead at once." He never moved after falling.

Post-mortem examination. — A man, apparently beyond fifty years of age, fairly built, but not muscular, and one who had no doubt suffered from inflammation of lung and pleura, adhesions being thick and strong on the right side of the thorax. The piece of lung on the table shows to all appearance the cicatrix of an old cavity. Heart and other organs healthy. The head had lost what the French call its "solidity," rolling about in any direction. It was a pure and total dislocation between the atlas and axis; the head, to which was attached firmly the atlas, was thrown forwards; the odontoid process thus pressing on the front of the cord, and causing instant death. The posterior and other ligaments connecting the atlas and axis and axis and occipital bone were ruptured, but there was no fracture, not even of the odontoid process, and, what I opine to be still more rare, no rupture of the transverse ligament.

I think this case will go far to prove the truth of Dupuytren's declaration "that such accidents are wholly beyond the resources of our art." I am aware that Malgaigne quotes two cases of recovery after total dislocation of the neck between atlas and axis. In one case which occurred in the practice of his father, the head was bent forwards, the chin touching the top of the sternum, and remaining in that position immovably fixed, all other portions of the body preserving their natural functions. In the second case, under Ehrlich, there was dislocation of the atlas backwards. The head was found resting on the right scapula, having completely lost its solidity, rolling from one side to the other. The patient was unconscious, and the whole body in a state of complete paralysis. The reduction was accomplished with an audible sound, and the head resumed its position firmly; but there is a further statement made that the head was afterwards maintained in place by a bandage. In the latter case I cannot understand the head, after rolling about, being placed "firmly" in position, with an audible sound. In the former I cannot understand the immovability of the head, the chin on the top of sternum, and the functions of the body preserved. At least it differs greatly from my case, where the chin reached to the middle of the sternum, and where there was perfect mobility of the head, which could easily be placed in position, but would not remain there.

Newcastle-under-Lyme.

THE DESCRIPTION OF A HANDY ETHER INHALER.

BY W. T. ANGOVE,

HOUSE-SURGEON TO THE YARMOUTH HOSPITAL, LATE HOUSE-SURGEON AND ADMINISTRATOR OF ANÆSTHETICS AT THE WEST LONDON HOSPITAL.

As there is a great want, just at present, of an effective, handy, and cheap ether inhaler, I have had one made, which seems to answer every purpose, and which may perhaps be of some use to the profession in general, but especially to private practitioners.

It consists of a cylinder (*b*), on to which fits, by a bayonet-joint, a cap (*a*), around the rim of which are attached several stout wires. The top of the cap is perforated with holes, and through the middle is inserted a long metal tube reaching nearly to the bottom of the cylinder. One end of an air-tight silk reservoir (*c*) is fastened to the cap (*a*), and the other to the flexible tube, to which is also attached the mouth-piece. The flexible tube runs through the reservoir, and is directly connected with the metal tube. The inside of the cylinder is lined with felt, and a couple of turns of the same material are wound round the wires, thus

presenting three surfaces for the evaporation of the ether. Having filled the reservoir with air, an ounce of ether is poured into the cylinder through the nozzle; this suffuses itself all over the felt. The mouth-piece is then applied to a patient; he is told to "draw in" his breath; the vapour he inspires comes from the reservoir, passes through the holes in the cap, over the evaporating surfaces of felt, and up through the whole length of tube; he expires the same vapour, which passes back to the reservoir and becomes recharged with ether during the next inspiration.

I have completely anæsthetised several individual patients in a little over one minute, one in forty seconds. An ounce of ether is sufficient to keep a patient under about ten minutes.

The apparatus is very handy, the cylinder being only about five inches high and three in diameter. The reservoir holds about a pint and a half. The length of the tube can be made according to taste.

Messrs. Arnold and Sons made mine, and are ready to supply them at a comparatively small cost.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

FOREIGN BODY IN LEFT BRONCHUS; TRACHEOTOMY; RECOVERY.

(Under the care of Mr. MAUNDER.)

FOR the following interesting notes we are indebted to Mr. Henry Habgood, house-surgeon.

Benjamin J——, aged thirteen, was admitted April 23rd, 1876, and gave the following account of his illness. He had been running with a smooth glass sleeve-link in his mouth, and on taking a deep inspiration, suddenly felt it slip into his trachea. He immediately had great difficulty in breathing, and his father stated that his face became flushed, and that he seemed in great distress; this condition lasted about a quarter of an hour, when he breathed freely for about nine hours, and then suffered a similar attack, followed by ten hours' interval, during which he breathed naturally; this was followed by another attack of dyspnœa, which lasted half an hour, and was the most severe of all. These attacks always succeeded slight fits of coughing. He was in good health when the accident occurred.

On admission, the boy was strong and healthy-looking. He was troubled with a peculiar whistling cough, and said that he could feel the foreign body moving up and down in his throat when he coughed. He was not distressed, and seemed in good health. Air entered both lungs equally. The throat was examined with the laryngoscope, but no foreign body could be detected. He was carefully watched in case an attack of dyspnœa came on.

He continued about the same for many days. No difference could be detected in the lungs. The peculiar whistling cough continued. But on May 11th the boy was feverish and thirsty; temperature 101·4°; pulse 132; respiration 36; skin hot and rather dry; face flushed. He stated that during the night he felt the foreign body descend further into his chest, and that he could feel it to be in the region of the left nipple. The peculiar whistling sound on coughing had disappeared. Air entered the lower lobe of the left lung less readily than elsewhere; puerile respiration was evident at the left apex and all over the right lung; heart's apex beat two inches below the left nipple and half an inch to the outer side. Evening temperature 100·4°; pulse 144; respiration 36.

On May 12th the morning temperature was 101·4°, the pulse 108, and respiration 42. He was seen by Dr. Down in consultation with Mr. Maunder. Dr. Down found that there was dulness at the base of the left lung, that scarcely any air entered the lower part, and that there was an absence of voice-sound there. At the middle scapular region he detected a peculiar whistling noise of high pitch. The right lung presented exaggerated respiration. He concluded that the foreign body occupied the bronchus of the left lung, and concurred with Mr. Maunder in the necessity for operative interference.

Chloroform having been at once administered, tracheotomy was performed. It was determined to place the boy with his head downwards, resting on the floor, and while in that position to shake the trunk and concuss the chest freely. In order that the wound in the trachea might remain patent during this process, the whole thickness of the structures on either side—skin, muscles, and trachea—was secured with a stout silk suture, and with the desired effect. The foreign body, however, was not dislodged. The boy was replaced on the table on his back. Mr. Maunder then took a piece of silver wire, about twenty inches in length, and having doubled it, thus formed a loop which was slightly curved, with the concavity towards the left. This loop was guided through the tracheal wound with a view to its passage into the left bronchus. The wire readily glided for several inches into the air-passage, and on being withdrawn after the second introduction brought the foreign body, enveloped in a mass of muco-pus, with it. The lad was soon quite well.

Remarks.—Mr. Maunder said that, knowing the nature of the foreign body—that it was smooth and incapable of enlargement by absorption of moisture,—and that the lad was not distressed by its presumed presence, he had hoped that it would have been expelled by the way it entered, and therefore he had not interfered earlier. It would be observed that the double wire, curved, was tolerably resistant, and if it could only be passed beyond the foreign body in the bronchus, the loop would necessarily scrape the tube as it was being withdrawn, and bring the obstacle to respiration with it. The irritation produced by the presence of the wire would also assist expulsion. He also suggested for consideration whether it would be practicable or not to keep the wound open by the above method, so as to avoid the discomfort and dangers of the tracheotomy tube, when this latter was only required temporarily.

Mr. Maunder has since tried to remove, on the dead subject, with a similar loop of wire, a smooth pebble from the bronchus, and has succeeded in doing so.

NORTH STAFFORDSHIRE INFIRMARY, STOKE-UPON-TRENT.

SUBPECTORAL SUPPURATION; SEPTICÆMIA; DEATH.

FOR the notes of this remarkable case we are indebted to Mr. WILLIAM A. FROST, house-surgeon, who had charge of the case.

James S——, admitted October 19th, 1876, at 5.30 P.M., quite unconscious. The only history that could be obtained was as follows:—For several years he had been a great drunkard, generally going to bed in a state of intoxication. He was in his usual health until the evening of Oct. 12th, when, on coming home, he was seized with shivering, and went to bed. On the following morning he complained of pain and stiffness of the right arm, which increased during the day, but nothing amiss was seen with the arm. On the evening of the 17th he became delirous—the delirium being of a low muttering character,—and he never recovered consciousness. There was no history of injury.

On admission into the infirmary, at 5.30 P.M. on Oct. 19th, he was unconscious; the pupils were dilated and inactive. There was slight reflex movement of eyelids on touching the conjunctiva. The pulse was very small, weak, 112; temperature 101°; respiration 40, entirely abdominal; tongue dry, brown, and cracked. He took no notice when spoken to, and gave a short moan at intervals. There was also incontinence of urine. A catheter was passed, and the bladder found empty. It was thought that the right pectoral region was slightly more prominent than the left. The integuments immediately behind the lower border of the pectoralis major muscle were œdematous, as was also

the corresponding part of the arm. There was no increase of tension, and the skin was neither red nor glazed. No fluctuation could be felt either in the pectoral region or in the axilla. From these symptoms it was concluded that although there might possibly be suppuration beneath the pectoral muscles, the local signs were not sufficient to call for an incision, more especially as the patient was evidently moribund. Brandy, beef-tea, and milk were administered, swallowing being performed without difficulty, but involuntarily.

On the following morning the temperature was 102·6°; pulse weaker and could scarcely be counted. Sordes were forming on lips. No change in the local symptoms. In the evening he died.

Autopsy, eighteen hours after death.—Body fairly nourished. Pleura and pericardium contained fluid. Liver fatty. Spleen decomposed. Kidneys large and smooth; capsules not adherent; cortices swollen and of pale colour. Brain-membranes natural; no flattening of convolutions; puncta vasculosa large and numerous; excess of serum in ventricles. Beneath and between the pectoral muscles on the right side was diffused suppuration, the pus being of healthy appearance. The suppuration was unconnected with bone or cartilage; nor could any cause be ascertained for it.

KALADGI HOSPITAL, BOMBAY PRESIDENCY.

REMOVAL BY LATERAL LITHOTOMY OF A VESICAL CALCULUS WEIGHING 2177 GRAINS; DEATH ON THE TWENTY-FIFTH DAY FROM PYÆMIA.

(Under the care of Mr. F. C. BARKER.)

IN the following case, owing to the large size of the stone it was found necessary to incise both sides of the prostate. The two largest diameters of the stone were 2⅜ inches and 2 1/16 inches respectively, and the weight was 2177 grains. The patient progressed favourably from the day of the operation, July 17th, until July 22nd, when a severe rigor ushered in an attack of intermittent fever, which, although subdued in a week as far as concerned its ague-like form, proved symptmatic of pyæmia, attended with deep suppuration in both parotid regions. Death took place on the 25th day.

Lalloo ben Mulloo, a ryot, aged thirty, residing on the bank of the Krishna, in the Kaládgi district, was admitted 13th July, 1876. Had had dribbling of urine for five months, two months previously to which there had been distressing obstruction and the occasional passage of blood. Prior to this he had been subject to occasional stoppages (two remembered) since childhood. Health reported good in other respects; and he was married only a few months back.

On passing a catheter, a gritty mass was met with in front of the bladder, which prevented the entry of the instrument. This proved to have been due to the bladder completely embracing the stone by its contraction.

The operation was performed on the 17th July, and was a protracted one, from difficulty in seizing and extracting the stone. All went on well from the 17th till the 22nd, the wound keeping healthy and the urine flowing through it regularly, the pulse gradually falling from 108 to 80, the temperature not exceeding 99·4°, and fears for the patient's safety seemed nearly at an end.

On the 22nd a severe but transient rigor took place, and was followed by a rise of temperature to 100·8°. The wound remained healthy, and there was no local pain. Defervescence to normal temperature and paroxysms returned again next day at 4 P.M., when the temperature exceeded 103°. The paroxysms continued to recur, at first regularly and daily, then abortively, with postponement, first for one, then for two days, to the 31st of July, when the last well-marked rigor took place, with a temperature of 103°, after which the final subjugation of the fever in this form was apparently accomplished by the abundant use of quinine internally and subcutaneously. From the 31st slight rises of temperature continued to take place with periodicity, but not to a height exceeding that to be expected from the existence of the wound, which to outward appearances, and so far as could be discovered by digital exploration, continued healthy. Progressive emaciation, however, and a cadaverous smell from the body, together with persistent bilious vomiting, diarrhœa, and the appearance of subsultus on the 31st, suggested the presence of some irremediable mischief. On the 30th of July the right parotid began to swell, was very painful, and suppurated in a week. On the 2nd of August the left one began to swell, and suppurated with its surroundings, till a probe could be passed from below the mastoid process into the pharynx. He died from asthenia on the 11th of August.

In considering that pyæmia may have been indicated by the symptoms, the following assemblage of them, coexistent with a deep surgical wound in a stationary condition, was taken into account: rigors, emaciation, yellowness of conjunctivæ, smell of body, intermittent fever, nausea and bilious vomiting, diarrhœa, and, finally, symmetrical and deep suppuration in both parotid regions. But, on the other hand, the rigors were brief, not frequently repeated, and only once severe. There was absence of arthritic suppuration and of visceral derangement as far as could be ascertained; the intermittent fever from which he had severely suffered in the previous year was cured by quinine in a week. There was also the important fact that last year he suffered from inflammation of the parotids, which caused inability to open the mouth. Lastly, the tongue had a white coating, characteristic of malarious fever, until late in the disease, when it became brown; and there was a promising appearance of strength, notwithstanding the emaciation, with clearness of mind and hopefulness, almost up to the last.

Some points which seem worthy of notice are—1st. The selection, on supposition of pyæmia, of parts (parotid glands) for suppuration which had been the seats of inflammation on a former occasion. 2nd. The perfect impunity with which, within four days, six hypodermic injections of quinine, each containing five grains, were borne while the patient was in a weakened and emaciated state, and the apparent effectualness of these in checking the daily ague-like fits. 3rd. In connexion with the concluding remarks on Mr. Berkeley Hill's two cases in THE LANCET, vol. i., 1876, p. 636, regarding the number of years a stone may be carried without serious consequences, this patient was afflicted for probably between twenty and twenty-five years. The calculus was, in great part, composed of oxalate of lime. The quinine solution used for hypodermic injection was the tartaric acid solution employed by Dr. Scriven, civil surgeon of Lahore, from whose directions in THE LANCET for 29th April last, p. 650, it was prepared.

GOVERNMENT DISPENSARY, KURSIONG, BENGAL.

REMOVAL BY LITHOTOMY OF TWO VESICAL CALCULI, WEIGHING RESPECTIVELY 2692 AND 428 GRAINS; RECOVERY.

(Under the care of Mr. A. B. MORRIS.)

THE following case was, in respect to some of its conditions, apparently even more serious than the preceding. In this case there were two calculi, which seemed to fit one on the other, the aggregate weight being 3120 grains. In this case also, it was necessary to divide both sides of the prostate; but, notwithstanding all these unfavourable circumstances, excellent results were obtained.

A tea-maker, aged forty, a native of Nepaul, was admitted into the Government Dispensary, Kursiong, on July 27th, 1876. He was brought from the Terai, where he had been working for several years, during which time he had suffered much from intermittent fever. On admission he presented a very emaciated appearance. He complained of continual pain in the region of the bladder, frequent and painful micturition, pain in the penis and about the loins. There was a discharge of pus and blood from the urethra. From the history it was probable that he had suffered from stone for many years. An ordinary metallic catheter, No. 10, was passed, and almost immediately the instrument had entered the bladder a large stone was struck. As there were no lithotomy instruments at hand Mr. Morris was unable to operate till the 31st. During the space of time that elapsed between the patient's admission and the above

date he was put upon milk and beef-tea diet, and was ordered a mixture of quinine, opium, and nitric acid. On examination by heat and nitric acid, the urine showed a large amount of phosphates and albumen. On the evening of the 30th, one ounce of castor oil was ordered. The bowels acted well during the night, and at 9 A.M. chloroform was given, and lateral lithotomy was performed, a staff grooved on the back being used. The stone having been estimated of large size, an incision three and a half to four inches long was made. When the neck of the bladder was opened and the left forefinger introduced into the viscus, two stones could be felt. The staff was now withdrawn, and a stone weighing 7 drachms 8 grains, about an inch and a half long by an inch wide, was removed by the forceps; this stone fitted on to the larger one anteriorly and to the left by a well-marked facet. The forceps were again introduced, but as the blades had to be expanded very wide, and as there was great danger of bruising the deep parts, the forceps were withdrawn. The right side of the prostate was incised. A stone, egg-shaped, but somewhat flattened from side to side, and weighing 5 oz 4 dr. 52 gr., was removed by the finger, aided by a scoop. Very little bruising or hæmorrhage occurred during the operation. An umbrella-plug was inserted into the wound, and retained there for twenty-four hours only. The patient was put to bed, and ordered a draught containing tincture of opium, which was to be repeated if necessary. Hot-water bottles were applied to the feet, and milk and beef-tea were given. He slept a short time; no hæmorrhage. By two o'clock in the afternoon the pulse was 120; temperature 102°. Ordered one ounce of brandy. At 6 P.M. the pulse was 152; temperature 103°; respiration 44. Ordered five grains of quinine every four hours.

August 1st.—Pulse, temperature, and respiration still remain about the same; slept fairly during the night.

2nd.—Patient says a little urine has come by urethra. Pulse, 12 A.M., 132; temperature 99·6°; respiration 24. Tongue foul but moist. Same diet continued; fever mixture added. Wound healthy; dressed by carbolic acid and oil, 1 in 20.

3rd.—Pulse 112; temperature 100°; respiration 16. Same diet continued, with one ounce of brandy three times a day; quinine and nitric acid continued. Sleeps well.

From this stage of his illness the patient did well, though, on account of his general debilitated state, the wound healed very slowly, and it was not until the twentieth day that the urine came freely by the urethra. During the latter part of the treatment meat was added to his diet; he also took cod-liver oil and iron.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 12th inst., Sir James Paget, President, in the chair. Three papers were read, each dealing with isolated cases, two of some rarity—viz., that of Mr. Hulke, in which general telangiectasis, most developed on the left side, was associated with abnormalities of the large bloodvessels of the lower limb and neck, and that of a case of hæmophilia associated with multiple nævi, by Dr. Legg. An interesting discussion arose out of the third paper read, in which Mr. Spencer Watson described the prolonged treatment, resulting in excision of portions of the median and ulnar nerves, for a spasmodic affection of the forearm.

Dr. Theodor Billroth, of Vienna, was elected to the honorary fellowship of the Society.

Dr. WICKHAM LEGG's paper on "a Case of Hæmophilia complicated with Multiple Nævi," was the first read. The patient, a musician, sixty-five years of age, attended for the first time as an out-patient at St. Bartholomew's Hospital on July 12th, 1876, suffering from epistaxis, to which he had been subject since boyhood. He had never any hæmaturia or hæmorrhage from the rectum, but had always shown a tendency to bleed from traumatic causes. His mother was said to have died from "loss of blood and dropsy," and of his four brothers and three sisters, one only, a girl, was subject to epistaxis, and of his own children, three out of six of whom are living, one a son twenty-seven years of age, and the other a daughter twenty-two years old, also suffer from epistaxis. The patient also presented numerous small nævi over the face, forehead, and various parts of the trunk; they were not congenital, but had been first noticed about twenty-four years before. Since the age of twenty-three he had been subject to painful swellings of joints, recurring at regular intervals, and affecting chiefly the great toe (where the first attack showed itself), but also occasionally the larger joints. There were no tophi in the ears or conjunctivæ. He was of passionate temperament, and subject to short but violent fits of anger, which always led to epistaxis. Beer-drinking led to the same result. When seen, he had been suffering from the bleeding daily for a period of six weeks. He was seen twice during the month, and was much improved, perchloride of iron being prescribed internally. The author remarked upon the tendency to traumatic hæmorrhages, pointing to the case being something more than one of ordinary epistaxis. It was impossible to say whether the articular affection was due to effusion of blood into the joints, and the occurrence of joint swelling in purpura and scurvy was alluded to. The coincidence of nævi with the tendency to hæmorrhage went far to confirm Dr. Legg's theory of the disorder being due to a congenital weakness of the vessels, which may be considered to remain permanently in a stage of early formation. Hitherto the presence of nævi in hæmophilia has not been noticed; but a second case was referred to in the paper, in which a precisely similar association was met with. In this case—also an adult—epistaxis had been present from boyhood, but the nævi had only been noticed for six years.—Mr. SEDGWICK supported Dr. Legg's theory as to the pathology of hæmophilia being based upon a primary defect in the structure of the bloodvessels. This was borne out by the hæmorrhages being confined to certain localities, their occurrence at a particular period of life, and their restriction to the male sex. Some of the most interesting cases were those of hæmorrhage occurring at the time of separation of the umbilical cord, mostly with fatal result. Such cases were especially prevalent in America, and the large majority of the infants affected were males. He knew of one case of recovery—a female child—in which the umbilical hæmorrhage was arrested with difficulty. Another infant of the same parents had died from this hæmorrhage. Many cases of hereditary epistaxis showed no disposition to bleed in other parts of the body; and such cases also showed a tendency to the occurrence of the bleeding in youth. The association of nævus—i.e., of structural excess of the vascular system—with the primary defect of parts of that system, was paralleled by examples of congenital absence of parts, such as of some of the terminal phalanges of the fingers and toes, which he had seen combined with duplicity of another terminal phalanx.—Mr. BIRKETT said that he had never met with a case of nævus associated with the hæmorrhagic diathesis; and considered that a more precise definition of the term "nævus" should be given. He thought that a nævus was essentially a dense fibrous structure, similar to the tissue of the corpora cavernosa and spongiosum, and that its greater or less vascularity depended upon its blood-supply being arterial or venous. The subjects of nævi were generally children in other respects remarkably healthy. He did not consider minute and nævoid points, such as were common in the skin of cancerous subjects, to strictly come under the head of nævi, for they presented no such development of the fibrous tissue, such as, for example, was met with in an enormous mass which he once removed from the abdominal wall of a young man. This growth involved nearly one half of the surface of the abdomen, and the wound resulting from the operation, though of large extent, was perfectly natural, and a good recovery resulted.—Dr. LEGG, in reply, said that he did not consider the rare group of cases of umbilical hæmorrhage referred to by Mr. Sedgwick to come under the head of hæmophilia. Such hæmorrhage was unknown in families where bleedings were widely distributed, and he knew of no case of umbilical hæmorrhage in which, recovery having taken place, any further disposition to hæmorrhage was noticed. He could not agree with Mr. Birkett as to the fibrous structure of nævi, many of which were solely composed of a congeries of vessels.

Mr. J. W. HULKE read a paper on a "Case of general Telangiectasis most developed in the Left Half of the Body, associated with Abnormalities of the large Blood-vessels of the Left Lower Limb and in the Neck." The case was chiefly remarkable for the extent of the nævoid disorder and abnormalities in the largest bloodvessels. E. L., an infant of a few weeks old, was in 1866 brought to the Middlesex Hospital with intertrigo in the groins and crease of the thighs, which disappeared under simple treatment, and a few nævoid specks. In 1870 she was again brought by her mother, on account of painfulness of left leg, which was swollen, the left half of the body being mottled with dull red nævoid spots (port wine stains), running together in the foot and on the face in larger blotches. The skin in the intervals was traversed by dilated veinlets, and in the left groin the nævoid tissue formed a prominent purplish spongy mass, covered by a thin epidermis. On the right side were also a few small nævoid marks. The left lower limb was considerably larger than the right. The mother said that in cold weather the child became blue and suffered more. It was concluded that the left leg, from its vascularity, was warmer than the right, but in testing with the thermometer the opposite was proved to be the case. She was again admitted on Jan. 3rd, 1871, having lost much blood the day before, as also in the previous summer of 1870, and early in December, which the mother had thought to be from the bowel. A fresh hæmorrhage occurring, the house-surgeon traced it to rupture of small bunches of the large spongy mass. The nævoid condition of the surface continued to advance and become almost confluent, the intermediate veinlets to become more numerous and distended, and the enlargement of the left lower limb greater. The child was in much pain and very feverish, and in subsequent feverish attacks had obstinate retching. On Feb. 5th, 1871, when she went home, the girth of the right thigh was 16½ in., and of the left 11⅛ in.; in May the mother reported another hæmorrhage, and in October, 1872, she was readmitted with glandular abscesses in both groins, which closed slowly. In August, 1874, she had erysipelas of the left lower limb, and superficial ulcers on the thigh, and when discharged convalescent, in September 1874, the girth of the right thigh was 9½ inches, and of the left 11 inches. In August, 1875, she was readmitted with intense vascular engorgement of left limb, attended with troublesome retching, the patches became gangrenous, and the eschars were very slowly thrown off. Three successive attacks of erysipelas followed in October and November, and on the last occasion screaming delirium set in, and death took place twenty-four hours after the beginning of the attack. Dr. Sidney Coupland, who made the post-mortem inspection, found that the abdominal aorta was much diminished below the cœliac and superior mesenteric branches, the left carotid and iliac arteries were smaller than those of the right side, and the external iliac and femoral veins were replaced by a plexus of veinlets which, with others, formed a "rete mirabile" intercalated between the cava inferior and left common iliac above, and the pelvis and lower limb below. The left internal jugular vein was less than half the size of the right. The bulk of the left limb was greatly increased, the girth of the thigh being 16½ in., and that of the right 10½ in. only. The limb was very œdematous, and the nævoid tissue was restricted to the skin and subcutaneous tissue, not invading the muscles. The microscope revealed a cavernous arrangement of the vessels, and an abundant cell-proliferation in, and thickening of the connective tissues. The author did not consider the excessive vascularity due solely to inordinate dilatation of pre-existing vessels; but that, no doubt, there was a considerable evolution of new vascular tissue. A striking feature was the gradual spread of the vascular disorder over the whole surface from a few specks on the left groin at birth. The inordinate development of peripheral vessels would be attended with a corresponding disproportional increase of their collective sectional area, over that of the feeding artery, and would favour the accumulation of blood in the capillaries, increased by the narrowness of the common iliac; the sluggishness of the current would favour the stagnation and clotting, and promote the retention of effete matters in the limb, and thus occasion plugging of vessels, and induce the repeated attacks of erysipelas; the overgrowth of the bones being an instance of the hypertrophy which is daily seen wherever overfeeding is induced by an increased afflux of blood from any cause, as the presence of a sequestrum, &c.—Mr. BARWELL thought the chief deficiency of the deep vessels being found to be in the venous system was of interest; for in a remarkable case he had met with, in which a large telangiectasis involved the skin of the left half of the body, accompanied by a dwindled lower extremity of the same side, it appeared that the femoral artery on that side was nearly three times as large as the right vessel. The vascular growth on the limb formed large folds, which in many parts pulsated strongly—e. g., in groin and buttock. The patient, who was still living, had never suffered from hæmorrhage, but she had never received any injuries in the vascular regions. He inquired whether these cases were associated usually with venous abnormalities rather than arterial.—Mr. HULKE confessed that his experience of the condition of the larger vessels in such cases was limited to the present one. Nor did he know of any record in which irregularities of the larger vessels have been noticed. Opportunities for such observations were of necessity rare.

A paper contributed by Mr. W. SPENCER WATSON was then read. It dealt with a "Case of Spasmodic Contraction of the Muscles of the Forearm and Hand, treated by Excision of portion of the Median and Ulnar Nerves." A young lady, aged nineteen years, was the subject, when nine months old, of so-called infantile paralysis. The right arm and right leg had ever since been contracted at the wrist and ankle, and the hand and arm, from the root of the neck to the tip of the fingers, had recently been subject to violent spasmodic movements, rendering the limb useless, and the patient's life a burden to her. Sleepless nights and consequent exhaustion had induced a state of great general debility with occasional paroxysms of hysteria. Under these circumstances (after the failure of other remedies), an attempt was made in the first instance to limit the force and frequency of the contractions by dividing some of the more prominent flexor tendons. In consequence of the difficulty of applying and retaining splints, this operation failed in producing any permanent good results. With the consent of Sir William Gull, in order to quell the irritability of the flexors more completely, a portion of the median nerve of the elbow was excised. This had a good effect, and after this the temperature of the limb, which had at one time been 2° Fahr. higher than its fellow, became much reduced. Still the deep adductors of the hand and the deep flexors in the forearm kept the wrist forcibly and permanently contracted. Mr. Watson, therefore, with Sir William Gull's consent, excised a portion of the ulnar nerve behind the inner condyle of the humerus. The contracted adductors and flexors were at once and perfectly released, and the position of the wrist and fingers rendered almost natural in appearance. The temperature of the limb in the axilla when last tested was only half a degree higher than that of its fellow. More than a year has elapsed since this last operation, and, in spite of much pain, still referred to the region paralysed as to common sensation, and much spasmodic movement of the upper arm and shoulder, the patient's condition is materially improved. The operations of tenotomy and neurectomy were undertaken on the hypothesis that the original lesion, though central, was becoming aggravated by constant peripheral irritation. The primary mischief was central; the peripheral irritation reacted upon the centre. A vicious circle of cumulative nerve irritation was thus established; the object of the operations was to break the continuity of this circle.—Mr. NUNN had recently seen a case of a lady, thirty years of age, who suffered from continued spasm of the flexors of the leg, which apparently followed upon a blow on the spine. He had not thought of dividing the nerves in this case, but did he do so he would prefer simple division rather than excision of a portion of the nerve, in the hope that the temporary relief would not be followed by permanent disablement of the limb, and yet would allow of the subsidence of the irritation causing the spasm. Was there not in Mr. Watson's case also a history of spinal injury?—Mr. SPENCER WATSON said that the symptoms began quite early, and before the injury to the spine.—Mr. HULKE alluded to the effect of stretching a nerve, as practised in Germany and in this country by Mr. Callender, as a means of temporarily destroying the conductivity of a nerve.—Mr. BARWELL referred to a case which he brought before the Clinical Society two years ago, in which

violent and prolonged epilepsy, depending on a neuromatous growth in a stump following amputation at the shoulder-joint, was cured by each of the nerves in the stump being stretched in turn. He remarked upon the difficulty involved in these cases of muscular spasm, especially when they occur in hysterical subjects; and he questioned whether, had the patient whose case had been related in the paper been left alone, the malady would not have worn itself out during the years over which the various operations extended. Might not these procedures themselves keep up irritation?—Mr. T. SMITH, although regarding the case as one of central irritation, and having no doubt that the treatment pursued was the best for the case, yet considered that perhaps less severe measures might have succeeded. The fact that the fingers could be straightened after division of the nerve showed that there was not permanent contraction. Some of these cases in women could be successfully treated by simply making a marked mental impression on the patient. One case of general twitching he had cured by division of both the Achilles tendons. In two cases hypodermic injections of warm water, at first of large amount, and then gradually reduced, produced a perfect cure, the patients being under the impression that morphia was being administered.—Sir JAMES PAGET had seen Mr. Watson's patient, and he was perfectly certain that no such simple means as injections of water could have cured her. Her case was evidently one of infantile paralysis, leading to contraction and wasting of the limb, and, after a time, to absolute distortion and shortening. More than once, when under chloroform, it was found impossible to restore the limb to the natural position. The muscular contraction was in great part maintained by reflex irritation, at the commencement a peripheral irritation; and the experience of the value resulting from nerve division in such cases had been so large that it was surely a reasonable operation to perform. Dr. Weir Mitchell had resorted to this measure in many cases, some of which Sir James Paget had seen; the disorders of nutrition following the nerve-division were present, but the primary disorder was relieved. He only feared that in Mr. Watson's case the cure would not be permanent. He considered that simple division of the nerve, without excision, would not have answered, as, with the union of the divided nerve-ends, there would have been a return of the trouble. For the past three or four years he had been seeing with Mr. Clover a lady who was hysterical, and who ten years ago fractured the lower end of the right radius. The hand and forearm became subsequently the seat of spasmodic contraction. Chloroform, tenotomy, and, lastly, excision of a portion of the ulnar nerve were had recourse to; but, although the latter operation afforded temporary relief, the symptoms again recurred. The patient had the misfortune to fracture the lower end of the left radius about this time, and the same phenomena followed, and were only held in control by the limb being kept continually extended on a splint. About a year ago Sir James had stretched the radial nerve. He did not think that such cases could be set aside as hysteria, to be met by some slight device.—Mr. SPENCER WATSON, in reply, said that the case related in the paper could not be regarded as one of hysteria, for, in addition to the spasmodic contraction of the muscles, for the relief of which the excision of nerves was performed, there was permanent contraction of the tendons; and one of the lower limbs was affected in a similar way, but in a less degree. The muscles of the upper arm and shoulder still remained permanently contracted. Whilst the seat of spasm, the temperature of the affected limb was as much as 2° F. higher than its fellow, pointing to considerable expenditure of nerve-energy. Such thermal differences would not be present in a case of hysteria.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE meeting of the Clinical Society on Friday, December the 8th, was well attended in anticipation of the debate upon the subject of Leucocythæmia and allied diseases, and the use of phosphorus in their treatment, papers on which were read at the previous meeting. The discussion was animated and somewhat prolonged, and the time permitted of a reply from only two of the readers of cases, the President and Dr. Gowers, Dr. Greenfield and Dr. Goodhart being prevented by the lateness of the hour from speaking.

Previous to the commencement of the discussion the President, Sir W. Jenner, announced the appointment of two scientific committees, of which particulars will be found elsewhere.

The President then requested Dr. Greenhow to open the adjourned discussion.

Dr. GREENHOW said that although the subject of the discussion was announced to be that of the treatment of leucocythæmia by phosphorus, that question might be regarded as almost settled by the cases reported by Sir W. Jenner at the previous meeting. Those cases showed that phosphorus had at least no specific action, and it was an open question whether it did not, in Dr. Gowers' case, lead to fatty degeneration of the kidney and to albuminuria. The caseation of the glands, in whatever manner produced, might, however, be the cause of the diminution of white blood-corpuscles. But the clinical history of leucocythæmia was a question which was of much importance to the Society. It seemed to be implied in the cases related that there were several forms of disease which were called leukæmia, but they formed a group with several characters in common. Dr. Greenhow then proceeded to point out some of the more marked clinical features which he had observed in the cases he had under his care. One of these was the occurrence of febrile attacks, with rigors, and high temperature followed by profuse sweating, which simulated attacks of ague, with the exception that they occurred irregularly. Frequent hæmorrhages were also known to occur commonly. Pigmentation of the skin he had observed very markedly in three or four cases, resembling that seen in chronic phthisis rather than that in Addison's disease. Four cases out of six presented this pigmentation. He had first observed this condition of the skin when investigating ague at Montpellier. One of the cases of leukæmia which he cited as bearing on the course of the disease was that of a girl, eighteen years of age, a maid-servant, admitted to the Middlesex Hospital in 1872. She had had rheumatic fever five years before; there was no hereditary taint. Six months previously she began to suffer from dyspnœa. The catamenia had ceased for five months; frequent epistaxis had occurred for three months. When admitted she was fair, well nourished, and very anæmic. There was pain in the left hypochondrium, and the spleen was considerably enlarged, firm, and tender. There were physical signs of heart mischief, slight albuminuria, frequent epistaxis, and occasional vomiting. The temperature was slightly elevated, varying from 98° to 100°. The white blood-corpuscles were from fourteen to twenty-five in the field, the red corpuscles deficient in number. After an attack of slight pericarditis, which passed off, the excess of white corpuscles largely increased, and the patient then gradually fell into a prostrate condition. There was no glandular enlargement. Passing to other cases, he had observed pigmentation, chiefly on the abdomen, in two cases, and, in addition, leucodermic spots in one. In another, where from sixty to one hundred white corpuscles were seen in the field, there was very marked pigmentation of the skin. Another case presented attacks of rigors, followed by fever and profuse sweating, there being no malarial history, and similar attacks were seen in three out of four cases. As to the treatment, believing, as he did, that the disease was a malignant disease analogous to cancer, beginning in the spleen or glands, and subsequently spreading to other organs, as the liver and kidneys, there was no more hope of cure than in cancer with our present knowledge, the utmost that could be done being to follow the course of the disease and inquire into its history. Syrup of iodide of iron and iodide of potassium formed the staple treatment in his cases. There was considerable variation from time to time in most cases in the number of white blood-corpuscles, which might be erroneously ascribed to any drug given.

Dr. BROADBENT gave the history of all the cases which had been under his observation since the treatment by phosphorus was commenced. The first case, published in

the *Practitioner*, was one of splenic leucocythæmia. The white blood-corpuscles were not so greatly in excess as in many cases; but the anæmia was greater, and there was a peculiar tint in the skin of the eyelids. The boy got better, both in the size of the spleen and the leucocythæmia; but the sequel was unknown. During his stay in the hospital some inflammation of the spleen occurred, and he did not know whether the improvement was due to that or to the phosphorus. Since that time he had had but little experience of leucocythæmia splenica. One case came into the hospital, but the patient was alarmed by the minute observations made, and left. In a case of intermittent hæmaturia, the appearance of the patient being that seen in essential anæmia, after iodide of iron and other drugs had been tried without benefit, phosphorus was given; but the patient got worse, and gastralgia and diarrhœa occurred. With regard to lymphadenoma, he had given phosphorus in one case where the glandular enlargement was very great and there was great emaciation; no effect was produced. In another case, one of supposed incipent lymphadenoma in a young girl, with glandular enlargement on both sides of the neck, after treatment by iodine had been tried, the glandular enlargement continuing and becoming more wide spread, phosphorus was given. The patient had become weak and dyspeptic, but the phosphorus clearly did good, the glands completely disappearing and the health improving. In the case shown, that of a boy, the treatment had not been sufficiently long continued. In another case which he had arranged to exhibit, but the patient did not come, the diagnosis was clear; she was an elderly woman, the glands were much enlarged in the neck, axillæ, and groins. The effect of the phosphorus on the glands was remarkable, and so also on the general health, and she became stronger. But the treatment was carried too far, and produced an attack of diarrhœa and vomiting, and much general ill-health. But the glands diminished to an extraordinary degree. One other case which he had seen was too far advanced to make experiments upon. In a case of essential anæmia, the only one since that recorded in the *Practitioner*, the temperature was high, there was some diarrhœa, and there was supposed to be enteric fever. The patient died in a week. No disease was found except diminished quantity of blood. He was inclined to class intermittent hæmaturia with these diseases. In one case which he had treated with phosphorus, great improvement resulted. He classed Addison's disease also with these diseases: in all of them febrile exacerbations were observed, marked pigmentation might be seen in essential anæmia, and there were great variations in the number of white blood-corpuscles in leukæmia. He thought that all these diseases had a common basis, and that the increase of white blood-corpuscles was not the essential factor of leukæmia, but that the original cause was some failure in the reaction between the blood and tissues or the blood and glands. He had been led to use phosphorus by the consideration of its action in poisonous doses, and the widespread degeneration of the glandular organs and muscles produced. Its ally, arsenic, caused the same, but was of great use when properly applied, and hence he was led to use it on the ground of its chemical relations and its physiological and therapeutical action. He had tried it in an obstinate case of psoriasis, in which the ordinary remedies had failed, and in one week the patient got well. He had never spoken of phosphorus as a specific for leucocythæmia, but as he had seen it do good in some cases of splenic leukæmia, lymphadenoma, and essential anæmia, and all that he asked was a further and more extended trial. Though it was capable of doing harm in some cases, it was beneficial in others. He did not trust to any form of administration but capsules; unless phosphorus entered the blood as such, it did not exert its proper action, and other forms of administration were ineffectual.

Dr. WILSON FOX said that he was responsible for the publication of the treatment of leukæmia by phosphorus. The case was published in THE LANCET (July 10th, 1875), in support of Dr. Broadbent's observation. The subsequent progress, however, was not altogether favourable. The patient entered the hospital at the end of 1874, was discharged well in May, 1875, and remained well throughout 1875. In May, 1876, he was readmitted under another physician, for one week, for a rheumatic attack. He is reported to have died this autumn in Devonshire, from what was called "bursting of the spleen"—which may mean a return of the leucocythæmia. The result was therefore ultimately unsatisfactory. But if the phosphorus had no effect in his case, one of two things must have occurred: either the diagnosis was erroneous or leucocythæmia is capable of spontaneous cure. The only peculiarity of the case was that the number of white corpuscles was not very great, only twenty being seen in the field at a time. He had lost thirty pounds in weight; there was hæmorrhage from the bowel, an enormous spleen, and some enlarged glands. He was going rapidly down hill until phosphorus was given, but subsequently he recovered a normal condition of the blood. Was it, then, a case of spontaneous cure? Phosphorus was either uncertain, inert, or injurious in its action. He had no prepossession in its favour; he gave it, in fact, almost hopelessly. He must say, however, that leucocythæmia is not always hopelessly fatal. Virchow mentioned a case of recovery, and Mosler gave four cases which were partially cured under iron. On the question of the occurrence of albuminuria in Dr. Gowers' case, Dr. Fox mentioned an earlier case of Hodgkin's disease, in which the glands were enlarged, the white blood-corpuscles increased, and the spleen enlarged, in which there was albuminuria, which was found to be due to lardaceous degeneration of the kidney. He did not know of albuminuria as a complication of leukæmia splenica. But phosphorus had been given in enough cases of various diseases to enable us to reject all idea of danger of fatty degeneration of the kidneys from its use. One or two other points raised in the debate deserved notice. There appeared to be a rising confusion between Hodgkin's disease and leucocythæmia, and statements were made as to the increase of white blood-corpuscles in the former. Virchow long ago described lymphatic and splenic leukæmia, but unquestionably there was a form of lymphadenoma in which no leucocythæmia occurs, and he thought that, considering the great differences which existed between them, they were better kept apart.

Mr. CALLENDER referred to a question of surgical interest. Some years ago, Dr. Andrew drew his attention to Mosler's treatment by transfusion, and they tried it in a child with this disease. A temporary benefit resulted from two operations, but afterwards the child passed out of view. It was found necessary to use defibrinated blood, on account of the difficulty of getting anyone to furnish blood at the time. But now, by Roussel's instrument, this difficulty might probably be overcome. He was personally impressed with the result in that case.

Dr. MOXON inquired what power was employed by Dr. Fox when he spoke of twenty white corpuscles in the field. (Dr. Fox explained that it was a Nachet objective, equalling about a quarter of an inch English, with No. 2 ocular, magnifying from 400 to 500 diameters.) Dr. Moxon said that he shrank from the first alternative suggested by Dr. Wilson Fox—viz., an error in diagnosis; yet he thought that the mere facts of the case, as stated by Dr. Fox, were against calling such a case one of leucocythæmia. Trousseau especially warned his hearers against regarding such cases as necessarily leucocythæmia. When a large abdominal tumour existed, it was far from infrequent to find a large excess of white blood-corpuscles—e. g., in cancer. Hence, in a case of idiopathic anæmia, in which there was a suspicion of latent cancer of the stomach, he had been enabled to make the correct diagnosis by absence of such excess. In this case phosphorus was given, and he seemed at last to have found a case, after thirty or forty trials of the remedy, in which some good resulted, but the patient abruptly expired a week later. The finding of twenty leucocytes in the field should certainly not be set up as a proof of leukæmia. The position is a curious one. Dr. Wilson Fox's case was the only one which seemed to be really benefited. Dr. Broadbent's cases were very melancholy, and he fell back on lymphadenoma as a proof of the advisability of phosphorus. Eight or ten years ago, Mr. Cock brought to him a large lump of glands taken from a boy's neck to examine with the microscope. Three times these glands had greatly enlarged and then subsided again, and he wanted to know the explanation of this return. He had since seen many cases of lymphadenoma, and found them to vary much in the amount of swelling of the glands from time to time. In one case he had seen great recession occur under bromide of potassium. And since these variations occurred as a part of the ordinary course of the

disease, they could not be cited as proof of the benefit of any special treatment. Referring to the cases of leucocythæmia treated by phosphorus recorded in the last volume of the Transactions (vol. ix., p. 83), Dr. Moxon said that he believed there was no ground for the belief in the existence of lymphatic leucocythæmia.

Dr. Bastian observed that the question of the relation of leukæmia to glandular and lymphatic disease was very important. Since Virchow described lymphatic and splenic leukæmia, it had been common to speak of them as distinct. He had had occasion to look into the literature of the subject, and he found that in a very large number of cases of lymphadenoma there was no leucocythæmia, but only the condition usually found in anæmia. In a certain number of cases in which the spleen was also enlarged, leucocythæmia was more frequent. Bonfils had recorded a number of cases of enlargement of the lymphatic glands and spleen without leucocythæmia. In Dr. Fox's case the leucocythæmia was not marked. He thought that Dr. Broadbent's view was the correct one—namely, that leucocythæmia was a superadded something, occurring mostly in certain splenic disorders. He had seen cases tending to show that there was variation in the course of lymphadenoma. One case, with masses of enlarged glands in the axillæ, groins, and neck, without leucocythæmia, greatly improved under bromide of potassium and cod-liver oil. Perhaps the tendency to variation in the enlargement is greater than has hitherto been supposed.

Dr. Scott Donkin thought that although a number of terms were used to denote certain diseased conditions of the glands and blood, we did not understand anything about the antecedent condition; beyond these facts we know nothing.

Sir W. Jenner believed that there was no strong evidence of the value of phosphorus; no real effect seemed to have been produced in cases of leukæmia. Dr. Wilson Fox's case was the only one of splenic leukæmia in which it seemed to do any good. He thought that the existence of lymphatic leukæmia was questionable. As to the symptoms, the sweating, emaciation, breathlessness, bleedings, &c., were characteristic of leukæmia; he questioned whether these symptoms were marked in Hodgkin's disease. Splenic leukæmia is a definite disease. His own cases were unequivocal, they were all treated for months; one of them was seen by Dr. Broadbent. As to apparent improvement he believed that Dr. Hughes Bennett had related some cases of leucocythæmia which got better without the use of any special drug. As to the danger of fatty degeneration, he thought that most practitioners had given phosphorus without producing albuminuria.

Dr. Gowers mentioned that he had received a letter from Dr. Dyce Duckworth, who stated that he had given from one-thirtieth to one-tenth of a grain of phosphorus in many cases of glandular and other diseases, but had never seen albuminuria in any case. He had given it chiefly in nervous diseases, but also, without benefit, in leucocythæmia and lymphadenoma. Referring then to the action of phosphorus, Dr. Gowers remarked, that in cases of acute phosphorus poisoning which recovered, albuminuria has usually been found to occur, and fatty degeneration of the kidneys was invariable in fatal cases. The late Dr. Anstie had recorded a case in which phosphorus in medicinal doses (one-thirtieth of a grain) produced temporary albuminuria, which ceased when the phosphorus was discontinued. Dr. Gowers argued that it was impossible in his case to dissociate the effect of the degeneration in the kidneys from that in the glands, and if the phosphorus caused the degeneration of the former, it might also of the new growth in the latter. The ultimate improvement in the condition of the blood was striking; the ratio of white corpuscles to red was at first as one to four, and afterwards diminished to one to twenty. The latter proportion was usually regarded as the standard beyond which leucocythæmia must be assumed to exist, and in the case referred to by Dr. Fox the proportion was certainly greater than this. As to the question of the occurrence of lymphatic leucocythæmia, there were strong grounds for assuming that in his case the glands were the source of the excess of corpuscles. Dr. Goodhart's case seemed to be out of the course of ordinary leukæmia; he thought it was rather consistent with the idea of an intermittent supply of white blood-corpuscles, due to intermitting pressure on the splenic vein by some of the enlarged glands. The mode of administration adopted at University College Hospital was that of giving the phosphorus in combination with resin, which had been found to preserve the properties of the phosphorus well, and to form convenient pills with tragacanth powder.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

At the meeting of this Society, on Friday, Dec. 1st, Dr. Creed, President, in the chair, Dr. J. C. Thorowgood read notes of cases illustrating the Treatment of Phthisis. In the first series of cases, it was shown how patients with a cavity in one lung only might recover and live for years. The cavity might become lined with a fibrous membrane, and so remain in a quiescent state. At times inflammatory action might be set up, by cold caught, in the cavity wall, and after such an attack it was possible that the cavity might contract and get smaller. Thoroughly quiescent cavities were not likely to contract much, owing to the rigid character of their fibrous wall. Hæmoptysis in the case of one who was known to have a pulmonary cavity was a serious thing, and might proceed from an aneurismal bulging of a vessel into the wall of the cavity. Among remedial measures, much stress was laid on a dry, bracing climate. Humid and relaxing climates promoted the softening and breaking down of lung-tissue. The hypophosphite of lime Dr. Thorowgood had found a valuable medicine in checking excessive expectoration and controlling diarrhœa. In the second series of cases, illustrating the arrest of phthisis when in the first or second stage, much benefit had resulted from the use of the hypophosphite of soda, a remedy which the author began to use in 1863, and of which he still had a very high opinion. An instance was recorded of a very obstinate case of recurring hæmoptysis permanently cured by passing several months in Canada. Phosphorated cod-liver oil had been used in some cases with very beneficial results.

Reviews and Notices of Books.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. von Ziemssen. Vol. XI.: Diseases of the Peripheral Cerebro-Spinal Nerves. By Prof. Wilhelm H. Erb, of Heidelberg. London: Sampson Low, Marston, Searle, and Rivington. 1876.

There is no branch of medicine that has made such rapid strides within the present generation, and none in which so much remains to be elucidated, as that of diseases of the nervous system. The obscurity which reigns over so many of these affections, as yet vaguely termed "functional neuroses," is dependent largely upon the fact that physiology and anatomy have not reached the limit of their discoveries in this most differentiated of all the elements of the organism. Pathology not founded upon the knowledge of normal structure and function is uncertain at the best, and probably fallacious and misleading; and without clear and definite ideas as to pathology, therapeutics must of necessity be empirical and vain. Such truths as these naturally force themselves upon the mind in perusing a work like the present. Gaps there are indeed in numbers, which remain yet to be filled, but the amount of sound knowledge gained upon the affections of peripheral nerves since Charles Bell first demonstrated the true nature of facial palsy, is well reflected in the monograph before us. And a marvellous record it is of patient observation and research.

Prof. Erb is well known as one of the highest authorities upon electro-therapeutics, and there could have been hardly a happier selection than that which has assigned to him the task of producing this volume of the Cyclopædia of Medicine. He has succeeded well; and it will be our object here to sketch the main outlines of the book, which is planned with an ultra-scientific regard to classification.

Keeping to the at present provisional division of nervous disorders into functional and organic, the author takes first the Functional Diseases (Neuroses) of the Sensory Nerves, to which the physiology of pain naturally forms the opening. Here at once we are confronted with the poverty of our knowledge, the conditions under which pain arises being summed up as those in which, either through excess of stimulus or heightened excitability of the sensory apparatus, "the intensity of centripetal excitation oversteps a certain limit." But when we come to inquire how such conditions arise, and even more when we try to formulate a definition of pain which shall be something more than a mere periphrasis, we are stopped by a *non possumus*. It follows that concerning neuralgia, of which the definition is that it is a "disorder of the sensory nervous apparatus, the chief and most important symptom of which is pain," we are equally in the dark. Prof. Erb thinks that there is no positive evidence for the theory advanced by the late Dr. Anstie, that all true neuralgias have their seat in the posterior roots of those spinal nerves in which pain is experienced; and he sums up the whole of our knowledge concerning the pathogenesis of neuralgia in saying that it is "a quite definite and peculiar form of trophic disturbance in the sensory nervous apparatus." With regard to the symptomatology of neuralgia, Prof. Erb points out that the "points douloureux" of Valleix are uncertain in their presence, and to be attributed to transitory conditions of increased excitability in portions of the nerve affected. After some valuable remarks as to the concomitant phenomena of the neuralgic attacks and on the paroxysmal character of the affection, the author advocates the use of galvanism in treatment, and, among drugs, places arsenic before all others. He does not seem to have had any personal experience of phosphorus, but most of the other remedies in ordinary use he has tried, and has valuable hints to convey with regard to their employment.

As an appendix to the chapter on Neuralgia is one on Headache; and then the neuralgias of individual nerves are discussed *seriatim*. With regard to sciatica, the author points out the features distinguishing it from muscular rheumatism and disease of the hip-joint, but thinks the difficulty of diagnosis is chiefly to be found in cases of hysterical articular neurosis, or articular neuralgia, to which Brodie was the first to call attention. In articular neuralgia, sleep is not disturbed, and the remarkable feature about it is the great disproportion between the violence and duration of the affection and the small amount of local disease.

A section upon Anæsthesia, cutaneous and muscular, is followed by chapters upon the various "neuroses" of the nerves of special sense—e.g. gustatory and olfactory—and of the motor nerves. The latter are represented by spasm and paralysis. Spasm is induced by an irritation of the motor apparatus, resulting either from an increase in the strength of the stimulus or from an increase in the excitability of the motor apparatus. Discussing the special varieties of spasm, we do not find much that is novel in the sections on facial spasms and torticollis—the treatment of which Erb characterises as one of the most thankless problems of medical practice; and with regard to both, galvanism and progressively increasing faradaism are held to be the chief agents to be used. He objects to neurotomy in torticollis, and does not mention conium, but says that morphia, atropia, and woorara are worthy of a trial. Under the term "writer's cramp" he believes that many various morbid conditions are included, and his account of the pathogeny of the disorder shows him to be inclined to attribute the phenomena rather to some central disorder of co-ordination than to the results of muscular fatigue, a view which has been so ably expounded by Dr. Vivian Poore. Complete recovery, or any marked improvement, is of very rare occurrence, says Prof. Erb; and in another part he adds, "in the present state of our knowledge we are justified in placing the seat of the cause of the typical forms of writer's spasm in the central nervous system, although we are not in a position to locate it with precision." In the treatment of this disease, he points out the inutility of faradaism, and that the only good result that can be gained is from the use of galvanism long continued.

In the section on Paralysis, Professor Erb recapitulates the results of his researches into the electrical and structural changes that take place in degenerated nerves and paralysed regions. He explains the paradoxical symptom of recovery of voluntary power, and not of electrical excitability, in a nerve, by assuming that in the absence of a medullary sheath in the newly regenerated nerve-fibres is to be found the reason for their non-electrical excitability, although their natural conductivity is unchanged. The value of the "reaction of degeneration" as a diagnostic sign is insisted upon, and its association with definite and considerable structural changes in nerve and muscle clearly shown. Sections are then devoted to the various peripheral palsies, that on facial palsy being particularly good; and the work concludes with a very brief notice of the small group of structural or anatomical diseases of peripheral nerves.

We believe that in Germany a second edition of this valuable monograph has already been published, and were it not that the translation cannot be obtained apart from the rest of the Cyclopædia, an equally successful issue might be the case in this country. We must not omit to notice that the whole burden of the translation of this volume has fallen upon Mr. Henry Power, whose translation of Stricker's "Histology" is well known. He has performed his task with admirable ease and grace.

OUR LIBRARY TABLE.

The Physician's and Surgeon's Visiting List, Diary Almanack, and Book of Engagements for 1877. London: J. Smith and Co.—We have so frequently pointed out the merits of this Visiting List that there is no need to indicate them now, but we feel that we are doing practitioners a service by directing their attention to the value and practical utility of this publication. It is really adapted to their wants, and its use will economise their labours in endless ways; and for these reasons we can honestly advise practitioners—whatever their mode of practice—to purchase Smith's Visiting List.

England's Policy in the East. By Baron HENRY DE WORMS, Author of "The Austro-Hungarian Empire." London: Chapman and Hall. 1876.—This is a well considered and able summary of the facts and opinions which demand attention in connexion with the Eastern Question as now before the country. Baron de Worms draws a well-marked distinction between agitation got up in support of measures of home policy, and schemes of foreign policy, condemning the latter as unreasonable and unfair. The Baron's view of the case is expressed with moderation and force. Anything coming from so clear a thinker will command respect, and any conclusion at which he arrives should certainly bespeak thoughtful and patient consideration.

The British Almanac of the Society for the Diffusion of Useful Knowledge for 1877.—This well known almanac, with its Companion or Year-book of General Information, is one of the oldest, best, and most useful books with which we are acquainted. The articles in the first part of the Companion, on subjects of astronomy, public health, currency, scientific instruments, and art exhibitions, form a *précis* of

the latest and most generally useful information; and Part II. contains, among other things, abstracts of important Acts of Parliament, and of Parliamentary and other official documents.

Mr. Punch's Pocket-book for 1877. London: *Punch* Office, Fleet-street, E.C.—Among the almanacs and pocket-books which we can all welcome at this season is "Mr. Punch's Pocket-book," with its amusing illustrations by Tenniel, Keene, and Sambourne. That for 1877, in addition to containing the usual calendar, cash account, diary, and memoranda, with a variety of useful business information, has some sprightly articles, with droll illustrations such as have rendered its predecessors acceptable to lovers of genuine humour.

Science Lectures at South Kensington. Macmillan and Co.—Three of these pamphlets, each containing two lectures, have been published. The first is by Captain Abney, on Photography; the second by Prof. Kennedy, on Kinematic Models; and the third by Dr. W. H. Stone, on Sound and Music. They were all delivered to science teachers and others interested in the special subjects, at South Kensington, as a means of extending information that was capable of being admirably illustrated by the great loan collection of scientific apparatus of the present year. The lectures before us are clearly given, are illustrated by many woodcuts, and are to be followed by others, such as those on Physiological Apparatus, by Prof. Burdon Sanderson and Dr. Lauder Brunton.

REPORT
OF
The Lancet Commission
ON
LUNATIC ASYLUMS.

PECKHAM HOUSE.

THIS house was first licensed in 1825. It was not noticed by the Parliamentary Committee of 1827. From "a statement of the number of insane persons in licensed houses on 31st December, 1828, distinguishing those admitted and discharged, or dead, prior and subsequent to the 1st of August, 1828," reported to the Metropolitan Commissioners Jan. 7th, 1829, it appears that at the close of 1828 the house, which then belonged to Messrs. Charles Mott and Co., Dr. Armstrong being the resident physician, contained in all 130 patients. Prior to the 1st of August, 1828, 18 private patients had been admitted (12 males, 6 females), and 74 paupers (27 males, 47 females). Between Aug. 1st and Dec. 31st, 1828, 15 private patients (12 males, 3 females) were admitted, and 42 paupers (18 males, 24 females). Of these, 5 male and 1 female, private patients, had died, and 4 male and 9 female, paupers (in all 19), that is, 12·75 per cent. of the "total number under treatment" from the opening to the end of 1828—viz., 149; the percentage of 13 deaths upon the 116 paupers alone being 11·21. In the report for 1844, Peckham House is mentioned with commendation of the site and grounds. The internal arrangements were pronounced satisfactory. The diet, however, was held to be insufficient and poor in quality. In 1847 the Commissioners approved the diet and described the accommodation as, "generally speaking, unexceptionable." They said: "Great improvements and alterations have taken place in this establishment since it was first visited by the Metropolitan Commissioners, and it is due to the proprietor to state that he has never hesitated to attend to one suggestion for the improvement of the asylum, although their adoption has no several occasions involved considerable outlays of money. ..... The entire cost has been, as we are informed, not less than £11,750."

Whatever may have happened in the interval, there is no reason to doubt the willingness of the present proprietors to carry out any improvement which may seem to promise the real advantage of patients, always provided that there is a reasonable prospect of some return. It would be irrational to expect, and therefore absurd to recommend, the lessees of these licensed houses to embark in a wild speculation. We have not hesitated to urge the proprietor of Hoxton House to rebuild at least a portion of that property, because, although it may be expedient to remove a part of the establishment to some more commodious site, the need of a licensed house in the present locality is obviously great, and likely to be permanent. The case of Peckham House is not exactly parallel. When the new asylum at Banstead is opened the bulk of the 130 paupers at present in this institution will be suddenly removed, and the future is uncertain. It is impossible, therefore, to deal with this establishment as we have dealt with others of the class. The *status quo* must be accepted as it stands, and little more than moderate improvements can be urged until the future of the establishment is determined by the course of events. That the house will be maintained there can be no question, and while the present mode of meeting the demand for "additional accommodation" finds favour in Middlesex and Surrey, this, like the other metropolitan houses, will be utilised as receiving stations; but it is probable three out of the five houses will be, more than heretofore, private establishments, and dependent upon lower middle-class patients. Until the long-threatened withdrawal of paupers occurs only what is necessary is likely to be done.

Peckham House is situated on the south of the Peckham-road, and occupies with its grounds about seven acres of land. It is built in blocks of very different character, some old and almost past patching, others creditably modernised, and a few in thoroughly satisfactory condition, and well suiting the purpose to which they are applied. There are many single rooms badly lighted, and a few that should be disused, not so much because they are radically defective in construction, but the impression produced by placing patients to sleep in apartments so much like prison-cells is disagreeable. There is not a single room that can be condemned, but it would be pleasant to know that some dozen were otherwise appropriated. The dormitories are comfortably arranged, and the beds, although in too many cases of flock, or badly-matted hair, without mattresses, appear suitable to the class of patients for whom they are designed. We certainly think some effort should be made to render the bed itself more comfortable. The pauper patients are, moreover, not well supplied with washing apparatus. They are encouraged to wash in the wards, but the number of towels did not appear adequate, and in other respects there is need of greater attention to details, small but important, such as the provision of brushes and combs, and water-bottles for each sleeping apartment. These seem trifling matters to note, but it is, as we have more than once remarked, in very little points of detail such as these the working efficiency of an asylum is displayed. The ordinary day attendants number in the proportion of one to seven patients on the male side and one to nine on the female. Keeping this in mind, we think the condition of some of the sculleries and floors betokens a tendency to let matters drift. The patients meanwhile—with a few exceptions on the female side, where slatternly dresses and uncombed hair seemed to indicate neglect—appeared well cared for; and there was no excitement or crowding, although the weather, when our visit was paid, kept the inmates within doors. Only one scratched face, and that on the male side, spoke of a recent encounter, of the class which will occasionally occur in asylums. Where these tokens of strife are numerous, it is natural to infer that either the conditions of life are irritating to the lunatics, by reason of overcrowding or a system of classification in which excitable cases are thrown too closely together, or the personal supervision of attendants is not sufficiently constant and judicious to compose disorder and prevent actual outbreak. It is exceedingly difficult

to keep the peace; but where attendants are intelligent and industrious, by observation and management, supposing the superintending officer to exercise close supervision and employ his attendants as direct agents in moral treatment, much mischievous mind and brain disturbance, of which these scratches, cuts, and bruises are the recorded marks, may be, and is, prevented. There is room for improvement at most institutions, but the general indications at Peckham House convey the impression that the discipline of attendants is fairly well enforced. That there is still something to mend may be inferred from such small indications as the following. A patient obviously in a condition to act impulsively on the slightest provocation left his ward while we were going round and entered a dormitory, where the head attendant chanced to be at the moment. As nearly as we could judge, five minutes elapsed before he was missed by his own ward attendant. The interval, though short, was long enough for mischief had the man been so inclined. Continuous observation is absolutely essential to safety. Then, again, if we mistake not, in an apartment next to one of the wards, two attendants were contentedly dining while the patients' dinner was in progress; this certainly is unwise, although we have seen the same thing elsewhere. The staff of attendants at this house is strong enough to provide the establishment with better service; nevertheless, as we have said, the condition of matters generally is satisfactory.

Restraint is not used, personal watching by attendents being substituted. Seclusion is employed, but we are glad to add the value of what, for want of a better term, is known as the moral system of treatment is fully recognised. The practice of surrounding patients with objects of interest, decorating the apartments with pictures, plants, and flowers, inducing the inmates to employ themselves either in work or play, with something to engross thought and take the mind as far as possible out of itself, and of changing the scene, by removing a disturbed patient from one ward to another instead of having recourse directly to seclusion—in a word, the policy of personal treatment, is adopted by the medical directors of Peckham House, and we hope carried out with the energy such a system requires and implies. We were informed that something like half the pauper patients are employed. This is a good proportion for a licensed house, though not, as we think, nearly sufficient, looking to the needs of the mental state. Sooner or later the power to make inmates of asylums generally, whether pauper or private, work must be accorded by the Legislature. Medical superintendents are, as we have repeatedly urged, at this moment entrusted with the far more dangerous power of placing their patients in bonds and imprisonment. Work is an integral part of "treatment," and until it comes to be generally recognised in that character, the proportion of cases cured cannot be raised to the point indicated by the possibilities of the disease, and the demands of personal, social, and public expediency.

The points to which we would direct special notice as requiring the attention of the proprietors and directors of Peckham House are neither many nor of a class to call for any considerable outlay. Great improvements have been effected within the last few years. We strongly urge the disuse or reconstruction of certain of the single rooms, particularly those on the ground floor in one block, and a better system of lighting these small apartments generally. Although they are only used at night, it is essential to cleanliness and comfort they should be well lighted by day. A dark room is never thoroughly cleared of all vapours and impurities. The ventilation throughout the asylum is free, but the openings near the floor are so constructed that they must be closed in the winter, if not at night all the year round; and it is when the weather confines patients within doors, and at night especially, a through current of air is needed. Some of the closet arrangements are defective, and the use of earth chairs in certain dormitories is necessary to eke out the supply. When it is, on other grounds, desirable to have conveniences of this kind in sleeping apartments (which would seldom be the case if each floor were provided with a decent watercloset), the earth system may be useful, but it is a nasty and troublesome substitute for a well-arranged system of watercloset conveniences. It ought, we think, to be a preliminary condition of these establishments everywhere that watercloseta, constructed on the best plan, should be provided in sufficient number, and on each floor. The addition might be easily made to any block of buildings by running up a small tower at some suitable spot, with closets on each level. It is the more remarkable that this has not been done at Peckham, as in the allied matter of bathing apparatus the provision is remarkably good, the water being turned into the baths by taps in a cupboard at the side of the room beyond the reach of the patients, the hot and cold water mixing in the supply-pipe. The appliances for bathing are greatly superior to those for washing. The latter require some extension and amendment. Mattresses should be supplied to all the beds; and where hair is substituted for flock, it should be of better quality and not mixed with wool. At present, the hair beds are as lumpy as the flock. Neither ought to be placed directly on the laths of an iron bedstead, even for paupers. The clothing of the paupers on the female side of the house is not satisfactory, and, as we have said, their appearance is untidy. It is, of course, difficult to induce the insane to bestow proper care on their clothes, and many are destructive; but an effort should be made. This is a matter that must always be in the hands of the attendants, but it is one upon which medical superintendents and directors ought everywhere to insist. When the improvements already in progress are completed the house will have a cheerful and pleasant air of comfort, which could be still further increased by attention to the defects upon which we have remarked, together with others which are recognised, and will, doubtless, soon be remedied.

The system of treatment pursued at this establishment appears to be judicious and successful. The percentage of recoveries, paupers only, upon admissions in 1875 was 42·52; that of deaths upon admissions, 29·92.

We are indebted to Dr. Stocker and Mr. Brown for the frankness and courtesy with which they met all our inquiries.

GROVE HALL, BOW.

THERE is not a great deal to say about this licensed house, regarded from the standpoint of the present inquiry. Although one of the houses receiving paupers, it only contains six, and of these two have been recently admitted. The establishment is exclusively appropriated to the use of male patients, and of these the majority (about 370) are soldiers, the rest being middle-class men, for whom a moderate sum is paid.

The house, with its grounds and a small dairy farm, occupies fourteen acres of land, and is pleasantly situated on the east of the Fairfield road. The buildings are commodious, with considerable cubic capacity, and admirably appointed, looking to the class of patients at present filling the wards. Soldiers are, under the best of circumstances, a rough set of fellows, and in some parts of the institution the provisions seem somewhat in excess of the requirements. This is, however, a matter which can occasion no regret. It is, however, impossible to avoid a reflection that Grove Hall might be doing better work than that of a depôt for cases which are nearly all obviously chronic, if not incurable. It must not be supposed from this remark that the inmates generally are of the "quiet" class; on the contrary, it would be difficult to find a body of lunatics calling for more constant supervision and more difficult to control. A great many of the soldier patients have served in India and suffered from tropical diseases, such as sunstroke and malarious fever, and, in several instances, abuse of alcohol and a history of syphilis also form important factors. The circumstance that order is preserved and tranquillity maintained in the presence of the worst elements of disturbance and an ever-brooding storm, without recourse to physical coercion, and a minimum of seclusion, is very remarkable, and bears the strongest practical testimony to the success of moral and managerial influences when properly applied.

At Grove Hall, if anywhere, the recourse to restraints would seem to be justified. Although we have very strongly denounced the restraint system, as a trouble-saving expedient, or a method employed to avoid risks, it must not be assumed that we are unable to conceive of a case, or circumstances, in which the measure may be inevitable and even expedient. As between the grip of a passionate attendant, and the passive resistance offered by straps or gloves, we

should decidedly prefer the latter. It is, at least, certain that mechanical restraint will not offer any violence in excess of that exhibited by the patient, although, as we have repeatedly urged, the application of the strait-waistcoat, straps, or gloves undoubtedly provokes the lunatic to struggle for freedom, irritates his brain and nervous system, and exhausts his strength. These are great evils, and must be held to bar the use of restraints habitually, or even as a reserve measure of safety. We would go further and insist that where the system of mental influence is thoroughly developed and applied it will seldom, if ever, be necessary to fall back upon mechanical coercion to ensure control. Nevertheless, there are, beyond question, cases of the class Dr. Conolly used to call "spoilt" in which irreparable mischief has been done by the use of violent measures of some kind in the early days of treatment. It is precisely cases of this class which compose the bulk of the population at Grove Hall. We have no hesitation therefore in claiming it as a proof of the sufficiency of the moral system judiciously applied, that the use of restraints has been, with the single exception of an instance in which gloves were used, almost unknown at this ably conducted establishment.

The attendants number in the proportion of about one to ten patients. Excellent discipline prevails, and with the aid of an efficient service, a fine laundry, and good working appliances throughout the establishment, the general condition is unexceptionable and creditable to all concerned. About half the ordinary inmates are employed, and abundant exercise is secured by military drills. There is a large cricket-ground and a skittle-alley. Walks outside the asylum bounds are constant. The wards are prettily decorated with flowers, supplied from a conservatory in the grounds. It is needless to go further into details. There is really nothing to notice, save in terms of high commendation. The only subject for regret is that an institution possessing so many structural advantages, so well provided in all necessary particulars as Grove Hall, and so ably and efficiently conducted, should not be utilised for distinctly curative work, of which it is clearly and in a special sense capable. Mr. E. H. Byas and Dr. W. J. Mickle have our best thanks.

This concludes our notices of the metropolitan licensed houses receiving paupers. We shall presently conclude the general remarks on this inquiry, which has now been carried to the limits of the provision made for the care and cure of the insane poor for the counties of Middlesex and Surrey.

THE METROPOLITAN ASYLUMS BOARD AND THE LONDON FEVER HOSPITAL.

THE announcement that the managers of the London Fever Hospital have refused to accede to a request of the Metropolitan Asylums Board for the use of one hundred beds in their hospital, in order that the Asylums Board may convert one of its fever hospitals, for the time being, into a small-pox hospital, will, no doubt, excite at the first considerable surprise. Under the difficulty in which the Asylums Board is at present placed, from the rapid increase of small-pox in the metropolis having already almost exhausted its immediately available hospital accommodation for that disease, the proposition that the London Fever Hospital should help them in the way indicated seems so natural and feasible that the arguments must be, indeed, strong which should justify a refusal to entertain it in the present exigency of the Board. The Asylums Board has come, in practice, to have functions not only of receiving sick paupers, but also of receiving people who, for sanitary reasons, ought to be isolated. This latter circumstance has especially told on their work in its relations to small-pox, the disease which people are most frightened of when it becomes active among them, and cases of which they are most willing to send into hospital. The various efforts which have been made by the Board to restrict the use of their hospitals to paupers have, in the main, failed. Small-pox increasing in the metropolis has made large demands on the Asylums Board, practically apart from the question of pauperism. This is even more the case in the present than in the last epidemic, though it will probably be remembered that the Hampstead Hospital inquiry showed very many well-to-do people coming forward as witnesses about tough meat and other things which real paupers would hardly have cared much, or as much, about.

The growing demands of this nature made on the Asylums Board have, it is not surprising, found it unprepared. It was appointed to do one, and a comparatively small, thing, and it finds itself made unavoidably responsible for another and much larger thing. No doubt the excessive demand is a testimony to the general quality of their work and management. But be this as it may, the Board is in straits for want of room in which to treat the mass of cases foisted upon it. At the beginning of November it reopened the Hampstead Hospital for small-pox, and at the end of the month had nearly 300 patients there, the small-pox hospitals at Homerton and Stockwell being at the time full to overflowing. In these straits the Board is now making new buildings on ground at Fulham and elsewhere, and it is using a part of the Homerton Fever Hospital for small-pox. It has made also the application to the London Fever Hospital, to which we have referred, for accommodation for fever patients, in order to liberate other beds in its fever hospitals for the use of small-pox patients. The refusal of the managers of the London Fever Hospital to accede to this application appears to have rested on the following line of reasoning.

Let it be premised that the London Fever Hospital makes it a boast that never, since its reconstruction in Liverpool-road, has it failed to meet the demands made on it by the requirements of epidemic fever in London. During the severe typhus epidemic of 1857–64, and during the outbreak of relapsing fever of 1868, it never sent a patient away from its doors who had been sent for admission. By building temporary wards and sheds it took in all applicants, and earned the gratitude of London, a gratitude that was expressed in the form of donations and subscriptions that enabled it to pay the expenses of its action. But with the establishment of the Metropolitan Asylums Board hospitals, the functions the London Fever Hospital had for so many years discharged ceased in respect to the pauper class, and thenceforth it has devoted its efforts—according to the original intentions of the founders of the hospital—to preventing the spread of contagious fevers among the class of the community that is not in receipt of parish relief. It has done its best to make its wards attractive and its service perfect, in order to induce that large section of the lower middle class who cannot command in their own homes the means of efficient isolation when they chance to be attacked by contagious sickness to have recourse to it, and it has year by year succeeded in bringing within the sphere of its operations more and more of that class,—artisans, clerks, milliners, servants, children; people who have no connexion with pauperism, but who cannot get, when attacked by fever, the conditions of residence required for the safety of others.

Now, since the hospital ceased to receive pauper patients, and with its reversion to its original intention of a sanitary hospital, it has been brought into intimate relations with sanitary authorities in the metropolis. St. George's, Hanover-square, Kensington, and other sanitary districts, have made arrangements with the hospital for the reception of cases of contagious fever in persons, not being paupers, whom it is desired for the protection of the general community to place in hospital. The successful use of the hospital in this direction, it is believed, is dependent upon

its dissociation from pauperism; and the proposition of the Asylums Board (even to meet a temporary exigency), it is held, would probably seriously compromise the work which has been done by the hospital during the past six or eight years—a work which may be described as one of familiarising the class of people above paupers with the advantages of treatment of infectious fevers in isolation. The managers of the hospital hold that, if they were to accede to the wishes of the Asylums Board, they would render a transient benefit to the metropolis, at the probable cost of a serious and long-continued harm. Although not every person sent to an Asylums Board hospital ought to be ranked as a pauper, every patient admitted into such hospital is, in fact, a pauper, admitted under the authority of the relieving officer. The managers of the London Fever Hospital have, therefore, decided not to turn aside from the particular and very important work they have set themselves to do, by again associating the hospital with pauperism, feeling that they would not be justified in sacrificing the interests of the non-paupers in respect to infectious fevers, in order to provide a temporary relief for paupers, which may be more legitimately if not more readily obtained in another manner. Moreover, the relief asked for is not in view of fever, but of small-pox.

Such we understand are, in brief, the reasons which have influenced the managers of the London Fever Hospital to refuse the application of the Asylums Board. They appear to us to fully justify the managers; and they manifest, we think, a sounder view of the requirements of the metropolis in respect both to fever and small-pox than is manifested in the request made by the Asylums Board; although we can sympathise very fully in the present difficulty of that Board.

THE IRISH CONJOINT SCHEME.

THREE of the five Irish bodies are creditably attempting to realise a Conjoint Scheme. The three bodies in question are Trinity College, Dublin; the King and Queen's College of Physicians; and the College of Surgeons. The attempt has so far succeeded as to have resulted in a scheme on paper proposed by a committee representing the Provost and senior Fellows of Trinity College, the President and Fellows of the King and Queen's College of Physicians in Ireland, and the Council of the Royal College of Surgeons. The bodies in question are to be represented in a Committee of Reference, which is—

(*a*) To determine the number of examiners to each subject at each examination.

(*b*) To arrange and superintend all matters relating to the examinations in accordance with regulations approved by the three corporations.

(*c*) To consider such questions in relation to examinations as they may think fit, or such as shall be referred to them by any of the three corporations.

None of the co-operating bodies are to grant any of their qualifications to any candidate who has not previously passed the examinations of the Conjoint Board.

All medical students availing themselves of this Board are to pass the same preliminary examination, which is to include English, Greek, Latin, arithmetic, algebra, and geometry.

Each of the three corporations is to appoint an examiner in each of the following subjects: Arts, Botany and Materia Medica, Physics, Anatomy, Physiology, Medicine, Surgery, Midwifery, Forensic Medicine. This will make twenty-seven examiners, the three in each subject to constitute a Court. Professors and lecturers in universities and medical schools are eligible for examinerships; but no private teachers.

The examinations are to be divided and subdivided thus:—The Previous Examination is to consist of four parts (*a*) Botany and Materia Medica, (*b*) Physics, (*c*) Anatomy, (*d*) Physiology, (including Histology), each to be passed separately on payment of a fee of four guineas for each subject. The Final Examination, the fees of which are to be fourteen guineas, is to include (*a*) Medicine, Clinical Medicine, Medical Pathology and Therapeutics, (*b*) Surgery, Clinical Surgery, Surgical Pathology and Therapeutics, (*c*) Midwifery and Diseases of Women and Children, (*d*) Forensic Medicine and Hygiene. The whole cost of the series of examinations will be seen to be £32 11s., or thirty-one guineas. The sums so raised are to go to the payment of the expenses of examinations, and the surplus is to be divided between the College of Surgeons, which is to receive five-eighths, and the College of Physicians, which is to receive three-eighths. Candidates passing the Conjoint Board and paying all the fees are to receive the licence of the two Colleges. Inasmuch as Trinity College is not to share in the surplus, her graduates and undergraduates will be admitted to the professional examinations under the Conjoint Board on payment of fees sufficient to cover the expenses of the examinations; to the previous medical examination on payment of one guinea for each subject, or four guineas in all; and to the final examination on payment of five guineas. Such graduates and undergraduates are not to be entitled to the licences of the Colleges of Physicians and Surgeons without an additional payment of twenty-one guineas. A curriculum of study is attached to the Scheme. Further, inasmuch as the Scheme would involve, if carried out, a diminution in the emoluments of the teachers of anatomy and surgery, the committee is of opinion that this result should be guarded against by fixing the fees in anatomy and physiology and in surgery at five guineas for the first course and four guineas for the second, two courses in both being required by the curriculum.

WATER-SUPPLY OF HEXHAM.

IN common with many other towns, Hexham is suffering from a deficiency in the supply of pure water. The want first began to press severely on the inhabitants in 1868, and has reached a pitch that may truly be termed a "water famine." The scarcity of water has led to a reduction in the hours of supply, and, corresponding with this reduction, the mortality has risen. The death-rate of the town for 1876 was a little over 24 per 1000; for last year it reached the startling figure of 37 per 1000! Many of the inhabitants have recognised the principal cause leading to this result, and several schemes have been proposed in order to augment the water-supply. Of these the three that most commend themselves are the Greenridge or Stublick Dyke, the Barley Well, and the Bracken Hill. A summary of these schemes recently appeared in the columns of the *Newcastle Chronicle*, together with some excellent comments on the necessity of immediate decision on the part of the somewhat vacillating local Board of Health. Our local knowledge is not sufficient for us to enter into a lengthy discussion of the merits of the rival schemes. It is sufficient to say that, after an attentive perusal of the summary above alluded to, we should unhesitatingly recommend the adoption of the Stublick Dyke scheme, which would yield a daily supply of 200,000 gallons, or more than four times the quantity that could be obtained by the adoption of either of the other plans. The water from Stublick Dyke is slightly peaty, but in all other respects suitable for household and drinking purposes. The watershed yielding the supply is remarkably free from population, and the land is almost wholly used for pasturage; so that the chances of pollution from sewage or manure are reduced to a minimum. The time has come for the Hexham authorities definitely to decide on one scheme or other. Pure water, in their case, can be obtained at a moderate outlay, and they have not the excuse that other towns too often have—the inaccessibility of supply and ruinous cost of obtaining it. The sanitary condition of the town and its high rate of mortality are urgent pleas for immediate action, and the sanitary authority incur considerable responsibility by pursuing a policy of procrastination and vacillation. A little wholesome pressure from the Local Government Board would, no doubt, help them to a speedy decision.

THE LANCET.

LONDON: SATURDAY, DECEMBER 16, 1876.

WHAT we want now is that Conjoint Schemes should be complete and uncompeting. To escape from the evil of numerous single examining bodies only by creating a number of incomplete conjoint examining bodies will be, if not to get out of the frying-pan into the fire, at least very imperfectly to remedy the evil which we are all anxious to cure. The medical examining bodies are evidently exceedingly anxious to have the scandal of various competing bodies with imperfect powers removed. They know that it does not admit of defence or justification. They know that, despite the apathy of Parliament in regard to such questions, one lucid statement in the House of Commons of the imperfection and injustice of the existing arrangements for conferring medical qualifications might result in what they would consider a revolutionary measure—that is to say, in creating for this single purpose a new examining body, without regard to any interests, excepting the interests of the public and of the profession, which are identical. The indifference of Parliament to this question, seemingly, but not really, technical, is certainly profound. It has served for years to perpetuate the existing arrangements, and we confess to feeling no security that it will not do so for years longer. The efficiency and the justice of medical examinations, though one of the most vital questions for the consideration of any State, is one of those things that the average member of Parliament considers uninteresting, fit only for doctors to discuss, and of no consequence to him, who, in case of personal illness, can call in a consultant, whose titles and whose fame are to him the best diploma. Still, the apathy of Parliament cannot always be relied on. It is sometimes dispelled in a single night, or by a single speech. This evil is so obvious, and the removal of it is so urgently called for, that the medical bodies themselves are trying to remedy it.

We have already three Conjoint Schemes, or, to speak more accurately, there are three quarters from which medical students can procure a complete diploma, instead of a half qualification, which is the only kind of qualification which most of the examining bodies have power to confer. The corporations in Scotland, more wise in this respect than the sister corporations in England and Ireland, have two Conjoint Schemes. The College of Physicians of Edinburgh and the College of Surgeons have been united for this purpose for fifteen or sixteen years, and give a double diploma for fifteen or sixteen pounds. The College of Physicians of Edinburgh and the Faculty of Glasgow have a similar arrangement. Together these corporations give joint diplomas to over a hundred students a year, and refuse their diploma to probably about sixty a year. The objections to these Scotch schemes are that they do not include the Universities, that the bodies still retain and use the right of conferring their single diplomas, and that the cost of the joint diploma is only about half of that under the larger schemes contemplated in England, and, as will be seen elsewhere in to-day's LANCET, in Ireland. This last objection is, in our opinion, a great recommendation, and it is not easy to see how the Scotch bodies could be compelled to raise the price of their examination, which is just about what both the English and the Irish authorities say represents the actual cost of the examination, the rest being surplus to meet other claims of the co-operating bodies.

The other quarter from which a complete qualification can be obtained, as we have often pointed out, is the College of Physicians of London. The licence of this body is a qualification in Medicine, Surgery, and Midwifery, and is recognised as such by the Local Government Board. The fee for the licence is fifteen guineas. In 1874 the College gave its diploma to eighty-five persons, and refused it to fourteen.

Such are the existing sources from which double diplomas may be obtained. By the English Conjoint Scheme the College of Physicians of London will forfeit its right to grant its licence singly, so that only the competition of the Scotch bodies will remain. But this is not inconsiderable, and is pretty likely to prove much more considerable if the Irish College of Physicians and the Irish College of Surgeons themselves adhere to a scheme, already approved by their representatives, for joining Trinity College in a Conjoint Board, the diploma of which is to cost thirty-one guineas, the professional examinations under which are to be three in number, and the examiners twenty-seven—that is, one in each of nine subjects—appointed by each of the corporations. The Irish bodies may flatter themselves with the look of this scheme. It really does look well, and would secure a very good examination, both preliminary and professional; but it is open to the serious objections of being too elaborate, too costly, and leaving untouched the competition—to say nothing of the Scotch corporations—of the Queen's University, which gave in 1874 degrees in Medicine to forty-four gentlemen, and the Mastership of Surgery to thirty, and whose examinations have the twofold recommendation of having been well-spoken of by the Visitors of the General Medical Council, and of being very cheap. The fee for each degree in the Queen's University is £5. The arrangement for giving a double degree constitutes a sort of fourth Conjoint Scheme. It is of no use to attempt to disparage these degrees on the score of cheapness. Some parts of the examination of the Queen's University impressed the Visitors of the Medical Council very favourably, and it is certain that it either is, or could be easily made, a very efficient examination.

In spite of all the faults and defects of the College of Surgeons of England as an examining body, it has a great *prestige*, and, in spite of the fact that men can get double diplomas elsewhere for less money, they take the diploma of the College to the number of between 300 and 400 annually. An English Conjoint Scheme, conferring the Membership of the College of Surgeons and the Licence of the College of Physicians of London, would be a popular thing in the profession. Men would be willing to pay something more for such a double diploma. If the cost of it could be reduced in some such way as we suggested last week, and the examinations could be kept good without being too complicated and exacting, the co-operating bodies might congratulate them-

selves on having fairly solved the problem of a single portal to the profession. They would either beat rivals out of the field, or compel them to make their boards as complete as their own. But we cannot think that the Irish scheme, of which we publish an outline to-day, leaving out the Queen's University and the Apothecaries' Society, involving three examinations and a very high system of fees, can be regarded as a satisfactory contribution to the settlement of this difficult question for Ireland.

A GRAVE question of practice has arisen of which we desire to speak with especial moderation and clearness. It is indispensable to deal with the subject at once, and to give expression, in terms which cannot be mistaken, to an opinion which has for some time past been gradually forming in the mind of the profession. Nevertheless, we are desirous to say what needs to be said with a full recognition of the difficulties that beset medical officers of health in the discharge of their onerous and important duties. It is much to be regretted that in the performance of their functions these men should even seem to interfere with the professional province of private practitioners. Such, however, is the fact.

A short way out of the difficulty would be to require that the holders of public offices, who are armed with the power of entering private families, and, in fact, interposing between the ordinary practitioner and his patients, should not themselves be engaged in practice. It is impossible not to perceive that the position occupied by an officer of health is anomalous. It is clearly his duty to visit the spot where any case of infectious disease may be located, and to direct the measures necessary for public safety. The performance of this task, with the most earnest wish to avoid even the appearance of evil, is extremely delicate and difficult. Too many private practitioners are lax in their precautions for the safety of the family and neighbours. When this is the fact, and the public officer comes in, unless he assumes a special brusqueness of manner popularly supposed to be part of the official character, he can scarcely fail to impress those around the patient with his superior knowledge and address. To speak plainly, in nine cases out of ten, there is a feeling that the medical officer of health, being himself a practitioner, may unintentionally succeed in effecting a lodgment, at least, in the confidence of the family. It is impossible to ignore this contingency without doing violence to common sense. The experience of practitioners in rural districts, and the crowded neighbourhoods of great towns, will furnish instances in which this has happened. The knowledge that it *may* occur engenders an uncomfortable feeling on both sides. The medical officer is haunted by a fear of being suspected, and many private practitioners, in a certain class of neighbourhoods, scarcely the lowest, are not free from a kind of distrust, which is most unpleasant and undesirable. If it were possible to require that public officers should not practise, the difficulty would be removed. This, however, is not to be thought of; the embarrassment must, therefore, be faced.

Some good may be done by merely calling attention to the matter. We trust it will, as the discovery of a remedy for the evil is, we fear, beyond the bounds of reasonable expectation. Medical officers of health should obviously keep rigorously to the letter of their duty, and that certainly does not require, although it would seem to permit, them to see the patient. It is not "in the bond" that the medical officer must diagnose the case for himself; it will suffice that he looks to the sanitary condition of the house and the circumstances under which the disease occurred. As we read the Statute, the medical officer is to proceed "upon information received," and his communication should be with "persons competent to act." A correct and, as we think, fair interpretation of the law would render it expedient for the officer of health to summon the practitioner in attendance to meet him. If this course were adopted, instead of "dropping in" upon patients and friends without the knowledge of the practitioner, half the difficulty would be removed, and we should not, as at present, be receiving complaints from ordinary medical men, who consider themselves aggrieved and prejudiced by the interference of a competitive practitioner who, having the right, exercises the privilege, of visiting their patients in a fashion which, though strictly legal, is decidedly *unprofessional*. We have said that the position of the medical officer is anomalous and his duty delicate; it will conduce to his comfort, and enhance the esteem in which he is held in the neighbourhood, if he will take the precaution we have suggested, of making the ordinary practitioner a party to his visit, and treat him as at least one of "the persons competent to act" for the limitation of the disease. Another act of courtesy within the power of medical officers of health is to give the friends clearly to understand that the visit is purely official, not only as regards the character of the visitor, but the object he has in view. Too often, we fear, families upon whom the medical officer calls are imbued with one of two sentiments. Either they regard his interference as an impertinence, or they look upon his visit as a special intervention for their relief. Neither feeling ought to be encouraged. The medical officer of health is a public official exercising a public function. He is not an inquisitor in any objectionable sense of the term, nor is he *orator*. His appearance on the scene is simply intended to secure the safety of the neighbourhood. A medical officer anxious to stand well with his professional brethren will take pains to have this clearly understood.

It may seem that these remarks apply almost exclusively to the intervention of the public official in cases occurring among the classes a little above the very poor. We intend that they shall be so applied. If the reports that reach us may be trusted, there is proportionally somewhat greater zeal exhibited in the repression of epidemic disease occurring among this class than among those lower in the scale. Something may be due to the sensitive feeling of general practitioners, but it is certainly alleged that medical officers do not exhibit the same alacrity in visiting the victims of infectious diseases among the lowest orders, with which they are credited in the grade a little above indigence. We offer no opinion as to the fact, but the existence of such an impression, however ill-founded, is sufficient to justify a suggestion that especial care should be taken to adopt measures to check unpleasant feeling wherever that exists. The self-respect and good feeling of medical officers of health will render any extenuation of these pointed remarks and re-

monstrances unnecessary. They are not penned in a spirit of suspicion, but with the desire to remove a ground of offence which, though in the main illusory, has just enough substantial excuse to render the appeal we have made expedient, if not imperatively necessary.

THE discussion which occupied the last meeting of the Clinical Society, on the use of phosphorus in leucocythæmia, can hardly be regarded with unmixed satisfaction. Those who entertained hopes of a verdict favourable to the use of phosphorus, or who had been led to believe that a remedy had at last been discovered, which, if it could not eradicate, might at least arrest, the deadly disease in question, have been doomed to disappointment. It is true that exception may be taken to the title which we have adopted for the debate, since other matters of equal or greater importance were also discussed, but the main outcome consists in the decision on the phosphorus question, and to that we shall chiefly refer.

The history of the employment of the drug came out very clearly, and we may briefly trace it as narrated by the several speakers. It is one of considerable interest, since it affords an example of the fallacies which beset the path of the scientific therapeutist, and the evils in this, as in all other scientific investigations, of rash speculation and hasty generalisation.

The originator of the treatment, so far as we can discover, was Dr. BROADBENT, and no one will wish to dispute his claim to priority. The case in which he first employed it was published in the *Practitioner* for January, 1875. It was one of splenic leucocythæmia, in which the increase in white blood-corpuscles was not so great as usual. Improvement occurred under the use of phosphorus, but as the boy had an attack of what was believed to be inflammation of the spleen whilst in the hospital, it was questionable whether the decrease of the leucocythæmia might not have been due to this rather than to the drug. The sequel of the case is not known. The next case was that under Dr. WILSON FOX, published in our columns on July 10th, 1875, and it was this which undoubtedly gave the impulse to the employment of phosphorus. The improvement in this case was certainly remarkable, an apparent cure resulting. But even in this, the most successful case as yet recorded, the sequel, as narrated by Dr. FOX, has not confirmed the idea of permanent cure, the patient having died in the autumn of the present year, after a not exceptionally prolonged course. It was allowed by Dr. Fox that cases of apparent recovery, though very rare, were on record, and that therefore the proof in favour of phosphorus was incomplete.

Since that time phosphorus has been tried in a number of cases of splenic leukæmia, several of which have been published, and in none of them, so far as we are aware, has any benefit resulted. The cases reported by Dr. MOXON at the Clinical Society last year, and by Sir W. JENNER at the recent meeting, afford conclusive evidence that, at least in many cases, phosphorus has not the slightest beneficial effect, either upon the proportion of white blood-corpuscles, or on the general course of the disease, and that it cannot therefore be regarded as in any sense a specific.

But how was it that it ever came to be regarded as of so great value, and whence arose the controversy which the discussion has for the present set at rest? Dr. BROADBENT related with great clearness the views which had led him first to employ phosphorus. As is well known, phosphorus, in poisonous doses, produces fatty degeneration of the tissues, especially the glandular secreting cells and muscular and nervous tissues; and in smaller continued doses its action may possibly be analogous. Again, phosphorus has a close relation with arsenic in its chemical affinities, and arsenic is well known to have a very powerful medicinal effect in promoting tissue-change, and is employed for that purpose in many diseases. Struck with these facts, Dr. BROADBENT thought that phosphorus should act beneficially in leucocythæmia, in which there appears to be excessive and, if we may use the word, cacoplastic action in blood-formation. So far we may agree with Dr. BROADBENT, and the value of his iatro-chemical speculation may be allowed as an hypothesis, but nothing more. But an hypothesis is a good servant but a bad master. One doubtful case could be of no value as a proof either of the accuracy of the theory or the value of the remedy; nor could any really scientific decision be arrived at until a trial of the drug had been made in a number of cases under different conditions, and all possible sources of error eliminated. This until recently has not been done, and it is only now that we are enabled to judge of the value of the treatment. We might indeed, contest the original hypothesis on *a priori* grounds, both chemical and pathological. So far as the chemical basis is concerned, fascinating as it looks in theory, it will scarcely be found to hold water. Similar considerations would apply with even more force to antimony, which has a far closer affinity with arsenic, both in its chemical relations and its physiological and toxic action, than phosphorus possesses. Again, the importance of the entrance of phosphorus into the blood as such, on which Dr. BROADBENT lays such stress, would lead to the view that its action must be very different from that of arsenic, which, introduced in almost any form of combination, exerts similar effects. Nor do we believe it to be probable that phosphorus could enter the blood uncombined. But another element of uncertainty, which should have led to a more rigorous investigation, exists in the great doubt as to the true pathological nature and relation of splenic leucocythæmia, and even, as the discussion has shown, as to what cases are to be classed as such. As Dr. MOXON justly urged, Dr. WILSON FOX'S case would not be regarded as a typical case by many, and even Dr. BROADBENT'S case was one admitting an element of doubt. But Dr. BROADBENT takes refuge in a yet wider generalisation, and, failing leucocythæmia, falls back on lymphadenoma as a disease likely to be benefited by phosphorus. Nor does he rest here, but regarding essential anæmia, intermittent hæmaturia, and Addison's disease, as diseases having a common basis with leucocythæmia and Hodgkin's disease, and essentially due to a similar defective nutritive action, he would apply the same treatment in them, with equal anticipations of benefit. But to take such a standpoint as this is to throw back the science of medicine at least fifty years, and to confuse together diseases which, so far as we know, are distinct in their morbid anatomy, clinical history, and all other essential features. If we allow such vague generalities

to govern our views of disease, we can expect no precision either in diagnosis or treatment, and we might, indeed, fall back on the nihilism of one of the speakers. It may be that we know as yet but little of vital actions, but let us at least hold fast what we do know, as a ground for future advance.

The course of the debate, indeed, clearly indicated the necessity for increased rather than diminished accuracy of definition of the diseases in question, and for a clearer understanding of the terms employed in their description. It is evident that a very wide discrepancy exists between the views entertained, not only as to the pathological nature and relations of leukæmia splenica, leukæmia lymphatica, and Hodgkin's disease, but as to their symptoms and diagnosis. Some, indeed, deny altogether the existence of lymphatic leukæmia, and others express great doubts as to its occurrence. On this subject we shall not now enter, but shall limit ourselves to the inquiry as to how far phosphorus has proved useful in the treatment of the two latter, taking them together. Dr. BROADBENT mentioned five cases, in four of which he had tried phosphorus. In one the treatment was as yet hardly commenced; in another, an advanced case, no good resulted. In two others, one believed to be a case of the disease in an early stage, another more advanced, great good seemed to be done. On the other hand, Dr. MOXON, who has tried it in several cases, and Dr. DUCKWORTH, whose experience has been considerable, have seen no beneficial result in any case. In Dr. GREENFIELD'S case no effect was produced by it, and the same may be said of Dr. GOODHART'S. The case reported by Dr. GOWERS alone seemed to lend countenance to the view that phosphorus induced a diminution of the disease, though, if this view be accepted, the other coincident and fatal degenerations appear to have been due to the drug in equal proportion. But in several respects this case was so exceptional, and the apparent results of the treatment so contradictory to ordinary experience, that we are not surprised that the majority of the speakers hesitated to accept the views so ably urged by Dr. GOWERS. So far, then, as these allied diseases are concerned, Dr. BROADBENT'S cases seem to stand alone in their apparent success. Yet we do not despair of finding some remedy which shall succeed when this has failed, nor can we but hope that the powerful physiological and toxic properties of phosphorus will yet be applied in some diseases of equal danger.

We may hope, at least, that this interesting episode in the history of therapeutics will lead in the future to a more careful and rigorous investigation of the action of novel remedies, and a less ready acceptance of results based on a limited experience.

THE appeal on behalf of the convict DRANT has been successful. The scandal of hanging a sick man for a deed which was, in fact, a symptom of his disease, has been avoided; but the error of pronouncing the last sentence of the law in a case of madness has been committed, and Justice is thereby disgraced. Justice is commonly represented blindfolded, but blind folly should not be one of her characteristics. The absurdity of proceeding to the end of a trial and solemnly declaring the life of a lunatic forfeited, is, and always will be, a farce, and it is one which cannot be often repeated without detracting very seriously from the majesty and, therefore, the deterrent influence of the criminal law, which echoes the ancient statute, "Thou shalt do no murder." An insane person *cannot* do murder, and the obvious effect of discovering that a man is insane after convicting and sentencing him for a crime he is unable to commit, is to deprive the highest act of judicial authority of its finality. The possibility that, after all, the most solemn procedure of a court of justice may turn out to have been, from first to last, a violation of common sense, throws doubt upon every such act, and, it is to be feared, operates, if not as an incentive, certainly as a non-deterrent, upon the minds of criminals. The preliminary question of capacity for wrong-doing should be settled before an accused person is arraigned, if only because the rescue of a convict from the sentence pronounced upon him, by showing that Justice has been guilty of an error, however gratifying to science, is against public prudence. It is scarcely surprising that judges and counsel receive the evidence of medical witnesses with a feeling of resentment, when it is possible the arm of Justice may be arrested, and contempt poured on the legal procedure, at the last moment by the instrumentality of a medical opinion which declares the offender everybody has taken so much pains to try, exempt by the disabling conditions of disease from the law which has been brought to bear upon him. Of course it would be more discreet to learn wisdom than cherish resentment, but the Bench and the Bar are institutions in which human nature plays a prominent part, and something more than the *argumentum ad hominem* will be needed to assert for medical evidence its claims upon the consideration of judges and juries, a consideration it does not at present receive.

No one can doubt that the case of DRANT presented the plainest and most unequivocal symptoms of disease. There has not probably been, for many years, a case so obviously unfit for trial on a criminal arraignment. Even the lay public know perfectly well that epileptics are dangerous in the extreme. The farce of trying an epileptic for murder is one which ought not to have been performed. The practical question is rather whether patients afflicted with this most formidable of maladies should be allowed to remain at large. Epilepsy is the form of disease which in old times was held to be "possession." It is notorious that persons afflicted with this mysterious affection are the victims of a disturbance which generates morbid energy; when this is pent up, or has accumulated, like electricity in the storm-cloud, it must be discharged. Under conditions fortunate for society, if not for the patient, the depraved or disordered force may be worked off in "fits." If these convulsive and explosive paroxysms do not take place, or if the energy exceeds the capacity of the discharging apparatus, acts of violence occur. These are parts of the fit, either replacing the normal convulsion, anticipating, or in excess of, and following it. It would be as reasonable to punish an epileptic for biting a bystander during the convulsion, as to treat any act of violence he may commit as a crime. There is no danger of mistaking a crime committed by an epileptic, in the intervals of his disease, for a part of his malady, because the impulsive act has well-marked characteristics, such as the absence of

motive, the suddenness of the onslaught, the almost indiscriminating nature of the attack, and the presence of associated symptoms, which cannot be mistaken for anything but the phenomena of disease. All these characteristics were clearly marked in the case of this man, DRANT, and it is manifest he would not have been put upon his trial had medical skill occupied that place in the administration of justice which it is entitled to occupy, and without which Justice is not only blindfolded, but *blind*. In this particular instance an acquittal on the ground of insanity was the only logical conclusion at which a Court properly advised could have arrived.

We speak unreservedly on this subject, because it is one to which the attention of the Legislature should be promptly directed. It is humiliating, and by no means reassuring, to think that sick people may be tried and convicted for their maladies, and, but for the intervention of some medical authority, will be put to death. The situation is one of exceeding peril, and discreditable to the common sense of the community as represented in the State. The practice of *pardoning* a person, erroneously convicted, for an offence he did not commit is silly enough; but the system which permits a man to be convicted and condemned when he is not in a condition to be guilty, and when his offence is plainly an accident of his disease, is something more than ridiculous—it is flagrantly amiss, and calls for amendment. Unhappily, the evil is recognised, and it is the remedy which stands in the way of reform. There is only one way out of the difficulty, and that the law is not, at present, prepared to take. The solution of the problem is easy, but the process is objectionable. A medical tribunal, medical assessors, or some system by which medical skill can be brought to bear directly upon the case of *every person* charged with serious crime, must be called into existence. The effect of this procedure would be to recognise the claims of science, and this cannot be expected, at least until the progress of events has thrown new light on the legal and general situation, and prepared the way by enforcing the urgent and irresistible demand for reform. At present medical skill is relegated to the position of collateral testimony, and men with no knowledge of medicine assume the right, not only to interrogate, or ignore science as their discretion dictates, but to hold the balance between conflicting professional evidence. The preliminary step to amendment must be the recognition that science can only be adjudicated in accordance with the principles of a scientific code, which men of science must administer. Until this step is taken there can be no substantial improvement, and we fear the day is yet distant when such an advance will be made.

IF we may judge from the communications which have reached us during the past twelve months, this year will be a memorable year in the history of vaccination in this country, from the exceptional occurrence of erysipelas after that operation. We do not remember at any previous time ever to have received so many letters from correspondents asking information or advice as to isolated instances of erysipelas following vaccination, and in which the occurrence was described as something quite exceptional in the writer's experience. But do not let us be mistaken when we describe these communications as numerous. We are speaking comparatively, and it must be understood that the total number of communications would be almost infinitesimally small when contrasted with the actual number of vaccinations performed in the localities where they had chanced to happen. We have regarded them as part of the phenomena of that prevalence of erysipelas which has been observed in several parts of the kingdom during the past eighteen months or two years, and which has been especially observed in some of our most important provincial hospitals. A recent event, however, as we gather from a provincial contemporary, gives to this subject a degree of importance which it had not previously possessed. The *Gainsborough News* records the proceedings of a recent meeting of the board of guardians of that union, from which we learn that there has been a curiously fatal outbreak of erysipelas following vaccination in the union. A report of three of the guardians, given in full in the proceedings of the meeting, describes no less than eleven cases of erysipelas (one, perhaps, doubtful) which had occurred in children vaccinated between the 3rd and the 9th October, and of which no less than six had ended fatally. If this statement be confirmed, the case will probably prove to be unique within the later annals of vaccination. The statement of the cases does not admit of any accurate judgment being formed with regard to the source of erysipelas. Taking, however, the facts given, the cases would appear to be remarkable for the length of time which, in the majority of them, intervened between the operation and the appearance of erysipelas. In one case the erysipelas is reported to have appeared on the fourth day, in three on the eighth day, in two on the tenth day, and in one on the twenty-sixth day. These dates at once suggest that the erysipelas was an accidental complication, and that it was not directly excited by the operation. Indeed, if these dates are accurate, we have no doubt that in this painful series of events we shall have another and more fatal illustration of that inclusion of vaccinated children in the late epidemic tendency to erysipelas than has before happened. It is assuring to find, with respect to a clear knowledge of the occurrences described in the *Gainsborough News*, that the Local Government Board has directed Mr. NETTEN RADCLIFFE and Dr. BEARD to make a full investigation of the several cases, and report thereon, and that Mr. RADCLIFFE and Dr. BEARD are now at work on the subject. Dr. BEARD is the vaccination inspector for the district in which the outbreak has occurred.

This unhappy fatality among vaccinated children in the Gainsborough Union, following so closely upon Mr. GLADSTONE's ill-advised letter expressing doubt as to exercising compulsion in vaccination, cannot fail to be read as in confirmation of that doubt. Such a conclusion would at present be at least premature. The clearly exceptional nature of the occurrences would alone suffice to preclude a hasty judgment in this matter. To those persons, however, who think that they see in the facts conclusive proof against the policy of compulsory vaccination, we would commend the weekly returns of mortality and sickness from small-pox in the metropolis at the present time. If vaccination accidentally gives occasion in very rare instances to serious, and in still rarer instances to fatal disease, what shall we say of

small-pox, which, even held as it now is manifestly in restraint by vaccination, slays its victims by scores, and disables for life such of the great numbers which it seizes who escape, by hundreds.

Annotations.

"Ne quid nimis."

THE ARCTIC EXPEDITION.

IT is satisfactory to observe, from the very energetic way in which our daily contemporaries have followed in the footsteps of THE LANCET as to the scurvy and lime-juice question, that the real subject at issue has already been brought into a very narrow compass. The candid avowal of Sir George Nares at the Mansion House dinner last week is to this effect: "A small portion of lime juice was carried in the Arctic regions for medicinal purposes, *but not for the purpose of rations.*" We have now one of the chief items of information that we have all along wanted. But the last link in the chain has yet to be produced by the Admiralty. What is the text of the written instructions that emanated from the Department of the Medical Director-General of the Navy before the expedition sailed, and were they carried out to the letter by the commander and the officers who served under him? Until these two questions are exhaustively answered, all the statements about frozen lime-juice, broken bottles, extra weights, and total darkness are, though important, at the moment entirely irrelevant, and appear to mislead and confuse the general public as to the question at issue. All other points can be afterwards discussed for the benefit of future expeditions, but we have not learnt whether or not, with the supplies and directions provided, the loss of life and the extensive outbreak of scurvy might have been avoided.

The glorification of the Arctic explorers proceeds, notwithstanding the self-apparent fact that the expedition has been a failure. The wonderful circumstance that the real cause of that failure is still persistently and laboriously disguised becomes increasingly wonderful, as the general features of the enterprise are clearly brought out. Everyone will echo the well-deserved compliment paid by the Prince of Wales at the meeting on Tuesday last to the readers of two interesting papers, but no one not interested in the collapse of a particular idea as to the way in which the Pole could be reached can avoid regret that, one road being blocked, another was not tried. The only reason this obvious course was not taken is that the expedition was scurvy-stricken, and there are the strongest grounds for believing that this untoward occurrence was distinctly traceable to the fact that the tried preventive, lime-juice, was not employed. The case lies in a nutshell. The story is, happily, unique; the moral is too plain to be missed. We can only wait, somewhat impatiently it may be, until the minute circumstances of the case are disclosed, and any explanation which may be possible of the omission to use a known prophylactic offered. The decision not to use lime-juice on the long sledging journeys was not made without deliberation. So far from a statement which has crept into *The Times* being true, the medical officers protested, as Sir George Nares has frankly admitted. The responsibility does not, therefore, rest on professional shoulders, but on the commander of the expedition.

POISONING BY CARBOLIC ACID.

IT is our painful duty to record another of those lamentable "deaths by misadventure" from carbolic acid poisoning, which are becoming of so frequent occurrence—this time in the Hampstead Small-pox Hospital. It appears from the reports in the papers that the patient, a man forty-two years of age, who was convalescent from small-pox, asked the sister in charge of the ward for his allowance of an ounce of port wine, and the sister, taking a stone gallon jar from under the table, poured out the prescribed quantity of what she supposed to be wine, and gave it to him. The man at once drank it off, not noticing the smell; in twenty minutes he became insensible, and died in an hour and a half. As usual, the explanation was simple, and "nobody was to blame." It appeared at the inquest that on the morning in question, the quantity of wine required in the convalescent ward being large, the steward had sent up the supply for this ward in a gallon stone jar, instead of, as was usual, in bottles. The carbolic acid happened to be in a similar stone jar, both being "properly labeled"—i.e., a label of some sort was affixed to each to indicate the nature of its contents. The colour of the fluid in each was also similar, carbolic acid, as is well known, when in contact with a cork, becoming stained of a deep red colour, from corrosion of the cork. The sister of the ward, knowing probably of only one stone gallon jar, unsuspectingly, and probably without carefully examining the label, used the first that came to hand; and we are not surprised at, and can scarcely blame her for, the painful result.

But we cannot say that we regard the case as one of such "pure accident" as it was stated to be, or at least some explanations are first required. The steward, of course, is not to blame for the use of a stone gallon jar for the wine, though ordinary paid nurses might object to such an inconvenient and weighty decanter. But how comes it that after such frequent accidents from similar causes no precautions have been taken against their repetition? Here is a case of a stone jar containing a quantity of a most fatal and deadly poison, which, until diluted, has but little odour, and whose naked-eye characters have nothing distinctive; the said stone jar, inconspicuously labelled, is left in the ward without, we presume, the knowledge of the sister in charge, or at least she is not properly instructed of the dangerous character of its contents. Hence the mistake and its lamentable consequences.

We wish to say nothing to aggravate the painful feelings of those concerned in this case; but we strongly suspect that, reading between the lines, the circumstances indicate a very undesirable state of affairs, and a divorce of the nursing from the general administrative department of the hospital which must lead to bad results. No nurse, especially one qualified to take so responsible a position, and with a proper knowledge of the dangers incurred, would allow two bottles of such character to be where they might be mistaken for one another. Evidently one must have been in use without her knowledge, and by some person not directly responsible to her. Nor can we acquit from blame whoever allowed the jar to be filled with the acid without seeing it conspicuously labelled as poison.

But we content ourselves with indicating how such accidents may and ought to be prevented in future. It cannot be too widely known that carbolic acid is a deadly poison, and that it should be subjected to and used under the same precautions and restrictions as other poisons. It has come to be regarded as an innocuous and, indeed, always beneficial agent by those unaware of its poisonous qualities. Not only ought it to be specially and conspicuously labeled "Poison"—a precaution which no careful dispenser would neglect—but it should be contained, when strong, in special bottles; and we would suggest that, when possible, it should be kept in a separate cupboard, and under lock and key, especially if the nurses be not fully trained. We are quite aware of the occasional difficulties which this course

might entail, but its necessity seems beyond question. We are inclined to agree with the Coroner that carbolic acid is not a safe disinfectant, and for many purposes might be advantageously replaced by some other agent. But it is so cheap and so effective as a fluid disinfectant, that it is still likely to be widely employed. The least that can be asked is that its use be made safer. But fair warning being given of its danger, future "deaths from misadventure" will be more rightly classed as "manslaughter."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE meeting of this Society on Tuesday last afforded more variety in the subjects brought forward than is usual with this body. The papers were brief, and the discussion on them was limited. Dr. Wickham Legg's case was certainly open to criticism, which, however, it did not receive at the meeting. It was held by the author to be favourable to his view of the primary lesion in hæmophilia being a defective structural condition of the bloodvessels, but the patient certainly did not exhibit very marked features of hæmophilia. He was a man of sixty-five, the subject of epistaxis, from which he had suffered since boyhood, and a history of a tendency to undue hæmorrhage from traumatic causes, without, however, any other of the phenomena of well-marked hæmophilia. He was subject to attacks of articular swelling, which so resembles gout in their seat and onset that it is not surprising that Dr. Legg sought for confirmatory evidence of this diathesis. Whether albuminuria was present, or any cardiac hypertrophy, we do not know; and even if the articular swellings had been proved to be due to effusions of blood, this would not negative their origin in gouty inflammation. The point of the case lay, however, in the gradual evolution during many years of capillary nævi, on various parts of the surface of the body—their existence being held to be indicative of disorder of the vascular system. Mr. Birkett drew a distinction between the ordinary nævus and those minute vascular dilatations so common in cancerous subjects, and, we may add, in a large number of individuals past the prime of life. But those nævoid spots are generally much more sparsely distributed than in Dr. Legg's two patients. Mr. Hulke's case was interesting from many points of view, and especially for the curious association of abnormalities of deep-seated vessels with the superficial telangiectatic condition, and we may join with the author in regretting that a complete dissection of the limbs could not be obtained. How far the abnormalities in question were the cause of, or were conditioned by, the gradually progressive surface growth of vessels it is difficult to say. At present the case stands alone, but should other opportunities occur for the examination of such cases after death, it would be well for particular attention to be paid to the condition of the deeper venous and arterial trunks. The reading of Mr. Spencer Watson's paper was unexpected, but the questions raised by it were of great practical import, and deserving of full discussion; we refer especially to the value of neurectomy, as opposed to single neurotomy or nerve-stretching, in cases of muscular spasm from centric disease.

SCARLET FEVER PREVALENCE AND FATALITY IN PORTSMOUTH.

WE have, during the past few months, more than once called attention to the continued remarkable fatality of scarlet fever in Portsmouth, and to the apathy which has been shown by the local sanitary authority in dealing with this exceptional epidemic. Since the beginning of the year 435 deaths from this disease have been recorded within the borough of Portsmouth, which had a population estimated at 124,867 persons in the middle of this year, representing a death-rate of more than 3·4 per 1000 persons living. Isolation is the only known means of limiting the prevalence of, and indirectly the mortality from, this disease; and yet the sanitary authority of Portsmouth has hitherto neglected to provide any hospital accommodation for the treatment of infectious diseases. A meeting of the local medical practitioners was held on Monday last, on the invitation of Dr. J. Ward Cousins, of Southsea, to consider the desirability of an extraordinary effort to check the epidemic prevalence and fatality of the disease, which has contributed to an unusual dulness of the Southsea season. Such a meeting of the profession at Portsmouth cannot fail to be infinitely useful in combating public apathy about infectious diseases, and that branch of sanitation which aims at their control and repression. Apathy of local authorities, it should be remembered, is only the reflex of public apathy; and until the public is taught to believe that epidemic diseases are controllable, serious attempts to control them can scarcely be hoped for. The two essentials to control are—hospital accommodation for cases where home isolation is impossible, and immediate information to the medical officer of health of every case of infectious disease. Registration of cases of zymotic disease, as a step to the registration of other diseases, is more urgently needed day by day. Our information as to the relative fatality of epidemic diseases is now very imperfect, in proof of which may be urged the wild estimates that have been made of the number of persons attacked by scarlet fever in Portsmouth during the present epidemic; the estimates range from 3000 to 12,000! It is well known that the mortality of scarlet fever cases ranges from 4 or 5 to 30 or 40 per cent.; but it has been stated on good authority that "epidemics of scarlet fever where the mortality is below 10 per cent. may be regarded as benign epidemics." The Portsmouth epidemic can scarcely be classed as "benign," and in all probability the mortality has considerably exceeded 10 per cent. Among 1077 completed cases under treatment in the Metropolitan Asylums fever hospitals during last year the mortality was 14 per cent.; and as scarlet fever has been more than three times as fatal in Portsmouth this year (in proportion to population) as it was in London last year, the mortality to cases in Portsmouth has also probably been higher. Assuming, however, that the mortality has not exceeded 14 per cent., the 425 deaths from the disease would give little more than 3000 cases; it is improbable that this number has been exceeded, although even this signifies that about 15 per cent. of all the children under five years of age in Portsmouth have suffered from scarlet fever since the beginning of the year.

SMALL-POX HOSPITALS AND SMALL-POX PANIC.

ALL sanitarians are agreed upon the urgent necessity for the provision of additional metropolitan hospital accommodation for the isolation of cases of small-pox occurring in families where home isolation is an impossibility. The selection of any site for such additional hospital accommodation is, however, invariably the signal for local panic, and agitation to prevent the site being turned to the proposed account even during the temporary emergency. This is discreditable alike to the courage and public spirit of the residents in such localities. Panic, as to any actual danger of small-pox infection from the near neighbourhood of a small-pox hospital, is simply the result of ignorance of the fact that revaccination after childhood confers all but absolute immunity from infection. In proof of the efficacy of revaccination, the evidence afforded by the reports of the managers of the Metropolitan Asylum District is abundantly conclusive. During the epidemic of 1870 1·2 no less than 14,800 cases of small-pox were treated

in the Metropolitan Small-pox Hospitals. All the nurses and servants engaged at those hospitals during the epidemic (at one time they exceeded 300), who were hourly brought into the most intimate contact with small-pox, in its most concentrative and infectious form, enjoyed, with but few exceptions, complete immunity from its attacks. These exceptions were cases of nurses or servants whose revaccination, in the pressure of the epidemic, was overlooked; and one case was that of a nurse who, having previously had small-pox, was not revaccinated, and took the disease a second time. If revaccination protects even those who, as nurses, constantly breathe the poison-laden atmosphere of a small-pox ward, what need have revaccinated people to be alarmed at the outside of a small-pox hospital? The best answer to the selfish and needless panic about small-pox hospitals, on reasonable sites, is an injunction to get revaccinated, which at the present time is scarcely more necessary around small-pox hospitals than it is elsewhere.

THE EXCESS OF INFANT MORTALITY IN ENGLAND.

THE fact that infant mortality in England compares favourably with that which prevails in most other civilised and uncivilised countries can scarcely be urged as a reason for not accepting as a national reproach the terrible waste of infant life which is going on around us. It is not generally known how large a proportion of infant mortality in England is due to the ignorance and neglect of parents, and to the low sanitary condition of those portions of our large towns inhabited for the most part by the poorer of our working classes. To know the extent of an evil is one step towards redressing it, and from this point of view the thanks of all sanitarians are due to Dr. J. M. Sutton, the medical officer of health for Oldham, who has just published an exhaustive paper on "Infant Mortality in England," which was read some weeks since before a meeting of the North-Western Association of Medical Officers of Health. The paper deals almost exclusively with purely infant mortality —that is, the death-rate among children in their first year of life, or less than one year of age; but the varying rate of mortality in various localities, in town and country, as well as in different classes of society, is carefully considered. It is pointed out that among the upper and middle classes only between 75 and 80 per 1000 of infants born die in their first year of life. Among farmers in agricultural counties (Norfolk and Devonshire are taken as examples) the proportion of infant mortality is 95 per 1000. According to Dr. Farr's Healthy District Life Table the average rate of infant mortality in our healthiest rural districts is 103 per 1000. Dr. Sutton bases upon this evidence his conclusion that "all infant mortality exceeding 100 per 1000 (or 10 per cent. of the births) during the first year of life is excessive, and due to causes entirely within human control." Measured by this standard, "it appears that during the year 1875 the lives of no less than 49,107 infants in England and Wales were sacrificed to ignorance and neglect, either in their treatment or in the general sanitary condition of the population." The excessive mortality among infants born out of wedlock is also considered in detail, and Dr. Sutton calculates that "the deaths of no less than 6509 infants during 1874 were due to the fact that 43,103 children in that year were illegitimate, instead of having been born in wedlock." The marked effect of improved dwellings in decreasing infant mortality is pointed out, with especial reference to the rate of that mortality in the Peabody buildings in 1875. Dr. Sutton, while not under-estimating the responsibilities of sanitary authorities and their medical officers of health in the matter of excessive infant mortality, confesses, while he deplores, the helplessness of such authorities to deal with a large proportion of the causes which tend to produce this excess. He urges strongly that infant mortality is "essentially a woman's question, and in a great measure we must look to women for its solution." If the women of England, so many of whom are clamouring for useful work, would only answer Dr. Sutton's appeal for their assistance, the present reckless indifference to infant life and suffering would soon cease to be a standing national reproach; and if English women affect to doubt the necessity for a national effort in this direction, we can recommend to their notice the facts relating to infant mortality in England in 1875, to which Dr. Sutton has called attention.

TETANUS AFTER HYPODERMIC INJECTION OF MORPHIA.

THE hypodermic injection of morphia is commonly regarded as devoid of the ordinary risks of surgical operations. But a case which has recently occurred at Southsea shows that, however slight it may be, its self-administration is not attended with immunity from risk. A lady has died of well-marked tetanus after the use on herself of hypodermic injection of morphia, it is supposed, given with a rusty needle. At any rate inflammation was found around several recent punctures. The lady had been taught the use of the hypodermic syringe some years before, for the relief of the vomiting of pregnancy, and there was some reason to believe that she had practised the injection surreptitiously where no actual occasion for it existed. At any rate she had concealed its recent use from her husband. The tetanic symptoms commenced in the jaw and ran a rapid course to opisthotonos and death. She was seen by Mr. Burford Norman and other medical men, who regarded the case as one of traumatic tetanus caused in the way we have intimated. It is certainly a conceivable result. A nerve may easily be pricked by the point of a syringe and an irritation set up such as seems to be the proximate cause of tetanus. But it appears to have been overlooked that very singular symptoms are in rare instances caused by morphia itself. In some of the lower animals this effect is uniform. In the mouse, for example, it is so. In man similar symptoms have been recorded. Dr. Guy mentions two or three anomalous cases in which tetanic spasms were prominent symptoms of poisoning by morphia, and a remarkable case was reported a few years ago in the *New York Medical Journal*, in which a woman suffering apparently from dyspeptic oppression, with great restlessness, was treated with a hypodermic injection of two-thirds of a grain of morphia, and twenty minutes afterwards one-third of a grain more. A few minutes afterwards she fell back in bed with her mouth open, and spasms of the muscles of the back. She ultimately recovered. It is possible that in such a case as that at Southsea a similar effect of the morphia may have assisted the slight traumatic cause in producing the tetanus. The case is another illustration of the unwisdom of allowing patients the control of their sedatives.

VIVISECTION AND THE BROWN INSTITUTION.

AT a recent meeting of the Senate of the University of London a communication was received from the Home Secretary intimating that an application had been received from Dr. Klein for the registration of the laboratory in the Brown Institution for the performance of experiments, under the Act 39 and 40 Vict., cap. 77, and that before acceding to this application the Secretary of State must receive the formal assent of the authorities of the Institution—viz., the Senate of the University. An attempt to postpone the consideration of the subject to a future meeting of the Senate, initiated by Mr. Hutton, was frus-

trated, and a motion "that if the Secretary of State grant a licence to Dr. Klein the Senate give their assent to the registration of the laboratory of the Brown Institution for the performance of experiments under the Act 39 and 40 Vict., cap. 77," was carried by 14 to 3. The noes consisted of Mr. Hutton, Mr. Osler, and Dr. William Smith. The majority in favour of the registration of the Brown Institution comprised Dr. Billing, the Dean of Lincoln, Mr. Fitch, Mr. Goldsmid, Sir William Gull, Mr. Heywood, Sir William Jenner, the Master of the Rolls, Dr. Johnson, Mr. Lowe, Sir James Paget, Dr. Quain, Lord Arthur Russell, and Dr. Storrar. Sir James Paget gave notice of the following motion:—"That a record of all experiments on living animals performed in the Brown Institution be presented to the Committee of the Institution at its next following meeting." The motion has been adopted with some slight verbal alterations.

TRANSFUSION AT THE LONDON HOSPITAL.

AN unexpected opportunity was afforded Dr. Roussel on Saturday last (the 9th inst.) of exhibiting his ingenious apparatus for the transfusion of blood upon a patient in the London Hospital. The case was that of a boy, under the care of Mr. James Adams, suffering from advanced disease of the hip, with evidence of amyloid changes in viscera, and œdema of the affected limb. It was decided to perform amputation at the hip-joint, and ether was administered and Esmarch's bandage applied. The patient, who was extremely prostrate and anæmic, lost no blood during the operation, but the pulse became extremely weak and small. Dr. Roussel happening to be present for the purpose of giving a demonstration of his apparatus to the students of the hospital, it was determined to take advantage of the opportunity thus afforded, and to perform transfusion at once. Accordingly, without continuing the operation after removing the limb and tying the arteries, Mr. Adams supplied six ounces of blood from his own arm to his patient on the table before him. The latter improved notably after the transfusion, the pulse becoming firmer and more full, but the pallor persisted; whilst the surgeon, with his arm bandaged after the venesection, proceeded on his way with the rest of the operation. We regret to learn that, although the lad rallied from the immediate effects of the operation, he succumbed two days after.

PEMBROKE WATER-SUPPLY.

THE report of Mr. W. Dennis, C.E., on the water-supply of Pembroke, has been laid before the Town Council of that town. It deals first with the nature and extent of the works that furnish present supply, so as to determine how far they serve or could be made to serve for the due supply of the inhabitants. The conditions at Pembroke are somewhat peculiar, as it may be said to consist of two distinct towns—Pembroke and Pembroke Dock-town—more than a mile apart from each other. The quality of the water supplied to Pembroke appears to be excellent in quality, but deficient in quantity. It has been proposed to augment the supply by means of a storage reservoir. We agree with Mr. Dennis in condemning this proposal whilst any possibility exists of obtaining an augmented supply from other springs in the neighbourhood. This he shows could readily be accomplished by making use of two springs known respectively as Pudding-end and Quoits-wood, which between them would yield 90,000 gallons a day. The estimated cost for the above work, including the necessary tanks, mains with smaller extension in the town, together with fire-plugs, fire-hose, sluice-valves, and all contingencies, except price of land and compensation, he puts at the moderate figure of £1845.

At Pembroke Dock the chief supply is derived from rainfall stored in private tanks and wells. One-third of the town, however, has no water-supply except such as can be obtained at the public conduits, and these public conduits, supposing them to be used only by those having neither tanks nor wells at their own houses, yield only two gallons per head a day. Looking to the nature of this supply, we are not astonished to learn that Pembroke Dock suffered severely during the drought of last summer. Mr. Dennis calculates the requirements of the town as at least 200,000 gallons. As the springs in the neighbourhood failed, on examination, to promise a sufficient and economic supply, Mr. Dennis directed his attention to the question of supply from deep sinkings in the red sandstone rock adjoining the town, and has come to the conclusion that the sandstone rock is most extensively fissured, and that at an adequate depth these fissures are permanently charged with water. He proposes, therefore, to sink a shaft or well on the top of the hill at the east end of the town, about 200 feet, and adits driven north and south. Steam pumping-machines would be required to lift the water, also a covered reservoir capable of holding a two days' supply adjoining the well ought to be provided. The estimate for this work, including all expenses, he puts at £14,600. The money, he suggests, could be raised under authority from the Local Government Board at a rate of 5 per cent., the principal to be paid off between forty or fifty years. An imposition of a rate of twopence a week on small houses and fourpence on large ones, together with rent of water for trade uses and Government payment for supply to troops, would be sufficient to provide for the original outlay. The whole report is extremely interesting, especially that portion relating to the supply of Pembroke Dock, as showing how the difficulties of securing a plentiful supply of water, under unfavourable conditions, can be overcome by skill and energy.

ABDOMINAL AND CÆSAREAN SECTION.

WE have not often had more pleasure, as medical journalists, than we have had recently in giving insertion to the two brilliantly successful cases, respectively by Mr. Thomas R. Jessop, of Leeds, and by Dr. James Edmunds, of London. The cases were alike in one particular—viz., their successful ending, both as regards the mother and the child. In nearly all other respects the cases were different, and, in consequence, the method of proceeding. Mr. Jessop's case, by far the rarer, indeed almost unique, was one of extra-uterine gestation, the child being lodged in the midst of the bowels, the placenta covering the outside of the fundus of the uterus and the inlet of the pelvis like the lid of a pot. The uterus was, of course, not opened; its cavity measured only two and a half inches. The placenta was not removed. Great pains were taken to leave it untouched, and to leave an opening in the lower part of the abdominal wound for the escape of placental débris and other discharges. Dr. Edmunds' case was one in which the Cæsarean section was necessitated by the existence of a large tumour filling the pelvic brim and cavity. The patient had been in labour sixty hours, for twenty of these in hard expulsive labour without any progress. It is no part of our intention here to repeat the particulars of the cases. The description of the cases by the operators will remain part of the classics of obstetric achievement, to be studied *verbatim* by those practitioners who may find themselves confronted with similar cases in the future. Dr. Edmunds' procedure is, perhaps, most remarkable for the care taken to avoid septic taint of all kinds, the fact that he did not apply any sutures to the uterine wound, and for the perfect simplicity of the after-treatment. The operation was performed in the Temperance Hospital, alcoholic beverages being rigidly excluded,

as in a former case by Dr. Edmunds, recorded in THE LANCET for Jan. 5th, 1861. At the end of the long operation the pulse and respiration were normal. She slept tranquilly the first night after. The pulse and temperature never varied from what was perfectly normal, and on the twenty-third day after the operation the mother and child left the hospital well. Such records raise the fame of obstetric surgery.

CERTIFYING FACTORY SURGEONS.

IT is sincerely to be hoped that the present Government will do nothing to lower the position or the remuneration of the surgeons acting under the Factory Acts. It is incredible that the Government should do anything of the kind. If there was any fear of such a thing the facts stated by the deputation which waited on Mr. Cross on Monday last should induce the Home Secretary to support to the utmost the factory surgeons. The large proportion of children and women among factory operatives makes the necessity for frequent medical certification and inspection very urgent. The medical element in the inspection is its most indispensable feature, and if this element be disparaged by contemptible fees, or by annoying conditions, such as that of requiring inspections to be made at the doctor's house, &c., the effect will be to drive the best men out of the work, and so greatly to diminish the chances of its being well done. Mr. Cross is not likely to sanction such changes. The public have a great interest in the matter. It is not uncommon to find itch and other infectious diseases in young operatives.

DR. CARPENTER ON "SPIRITUALISM."

THAT great authority on all matters connected with the functions and acts of living organisms, Dr. W. B. Carpenter, has done timely service by speaking out clearly and temperately on the subject of "Spiritualism" and its supposed claim to the attention of scientific men. The sum of the verdict is that the promoters of the "system" have nothing to show which has not been already investigated, or which they are prepared to submit to scientific tests. Dr. Carpenter lays down the principle upon which we took our stand some weeks ago. The phenomena alleged to be produced by a new force are not capable of being investigated by scientific processes, as any genuine and natural fact must be. There is in the minds of every explorer in science "a prepossession in favour of natural laws." If these laws are violated it is indispensable that the proof of this astounding fact should be given as clearly and conclusively as the evidence upon which the existence of electricity and magnetism rests. What is now done in the dark under conditions that exclude accurate tests must be accomplished in the light with no restrictions. As matters at present stand, spiritualists have no claim on the time or consideration of men of science, and can only be regarded as the victims of a delusion which the self-possessed men among them should strive to dispel. It is proof of singular weakness to set down as mystery all we do not happen to be able to explain.

THE SOCIETY FOR MUTUAL DISSECTION.

A PARIS contemporary publishes the full text of the document drawn up by nineteen physicians and surgeons of that city, giving the reasons for founding a society which shall have for its object the performance of skilled post-mortem examinations upon each of the members. The signataries base the formation of such a society upon the high scientific ground that the intellectual future of humanity depends entirely upon the possession of more or less exact ideas of cerebral functions, and the localisation of the different mental faculties. This object being only imperfectly obtained by experimentation on animals, it is proposed to fill the gap now existing in what may be termed physiological psychology, by the accurate and exhaustive examination of the brains of individuals whose mental calibre and conditions of life are fully known. It is hoped also that the wide impulse given to the performance of autopsies, other than in hospitals, will lead to more light being thrown upon hereditary affections, and also to an increase in measures taken for the public health. The Society then hopes by its example to overcome the objections which still so widely prevail upon the subject of post-mortem examinations, and in the two articles which are to be subscribed to by all members, it is declared that each member is willing to submit his body to dissection after death; and in order that his wish shall be carried out he is to duly execute and sign a form of testamentary deposition to the effect that such examination be proceeded with after his death. By it also he bequeaths his body, and especially the brain and cranium, to the anthropological laboratory, to be there dealt with as may be thought fit, and with an especial reference to the objects above mentioned.

A WINTER RESORT.

THE approach of winter in these isles annually drives off a numerous contingent of invalids, who distribute themselves over southern Europe, where they hibernate until returning spring enables them to endure the English climate. Those with ample means at command are wise in basking under Italian skies during this period of the year, and we have nothing to urge against their migration. There are, however, many who, although in dread of a rigorous winter, and anxious to avoid it, are yet unable to afford the luxury of so costly a change. To these we would point out that there are many salubrious spots in the country remarkably favoured by nature, and where the minimum amount of cold and discomfort may be experienced. We allude especially to the Welsh and Cornish coasts, studded on which are sheltered nooks, where the consumptive patient may pass the dreaded period in reasonable comfort. Llandudno, a favourite seaside resort in Wales, would appear from its meteorological records well adapted to the class of invalids we have endeavoured to describe. As a proof of the mildness of the locality we may state that roses and hawthorns in bloom were received in London this week from a resident there, and we are informed that roses are often known to flourish all the year round in Llandudno.

A MERITED REBUFF.

THE irrepressible Society for the Abolition of Vivisection has done many foolish things of a nature calculated to damage the cause it advocates so fervidly on the platform, but nothing so ridiculous, and we will say impudent, as its recent application to the Home Secretary. The Honorary Secretary of the Society wrote to Mr. Cross, asking how many licences had been applied for and what number granted by Her Majesty's Government under the Cruelty to Animals Act; also to whom such licences had been granted, and whether the names of such persons were or would be published in the *London Gazette* or elsewhere. The following concise reply was sent: "Sir,—I am directed by the Secretary of State to acknowledge the receipt of your letter of the 23rd inst., and to acquaint you, in reply, for the information of the Society on behalf of whom you write, that he must decline to furnish the statement requested as to the carrying out of the Act 39 and 40 Vict., cap. 77, to private applicants. I am to add that the names of holders of licences under that Act will not be published in the *London Gazette*." The style of the answer may be

commended to an eminent statesman not now in office, who is wont to give voluminous replies to persons who have nothing better to do than to put absurd questions on subjects concerning which they are in total ignorance.

STATE MEDICINE EXAMINATIONS AT THE LONDON UNIVERSITY.

THE "Examinations in Subjects relating to Public Health" have been held during the week at Burlington House; the University of London thus following the example set by Dublin and Cambridge in attempting to meet a public demand. The questions on "Hygiene," on "Medicine in relation to Origin and Prevention of Disease," and on "Vital Statistics, Meteorology and Geology," were well calculated to test acquaintance with these branches of State Medicine. Future candidates will have the advantage of judging from these papers the nature of the examination which they will have to undergo. The examiners in Hygiene were Captain Douglas Galton, R.E., F.R.S., and John Simon, Esq., C.B., F.R.S.; in Preventive Medicine, Dr. Fraser, F.R.S.E., and John Simon, Esq., C.B., F.R.S.; Dr. William Farr, F.R.S., D.C.L., taking the subject of Vital Statistics, and Dr. Fraser, F.R.S.E., that of Meteorology and Geology.

ANOTHER STATUE TO LIVINGSTONE.

IN March next Glasgow will possess a bronze statue of the great missionary explorer, who received his education at her medical school. The sculptor is Mr. Mossman, and those who have been permitted to see his work are unanimous in their opinion that his patience and skill have triumphed over the difficulties of a by no means easy undertaking. Livingstone is represented as standing by the stump of a palm-tree, over which his cloak is negligently thrown. He seems in the act of speaking—expounding, let us say, to his heathen audience the message of the Sermon on the Mount. The right hand supports itself upon the tree; the left holds a Bible, one of the fingers being inserted between the leaves. The expression is said to be remarkably characteristic in its combination of earnestness, intrepidity, and a certain genial undertone of philanthropy. The accessories are selected with ingenuity and taste, and convey the beneficence of his mission as a liberator, and then an enlightener of the slave. The commercial capital of Scotland does herself honour in thus commemorating a man who, with the widest and warmest sympathies for his kind, had also an intense attachment to the land of his birth, and to the seat of his professional education.

DENTAL SURGEONS IN IRELAND.

A RECENT trial in the Four Courts in Dublin reveals some remarkable facts, and proves how necessary it is that qualified members of the profession practising dental surgery should assert their position. The defendant seems to have founded an establishment which he called a dispensary. Another dentist, who appears to have cherished a like ambition as founder and honorary secretary of a similar but more pretentious institution, was called as a witness, and somewhat distinguished himself. He admitted that he had no sort of diploma; he could not give an explanation of the word hypertrophy; he had once seen a case of malignant tumour, described epithelial cancer as being like a "spongy cauliflower," and seems to have founded his right to call himself dental surgeon on the strength of two flying visits to the Dental Hospital of London. We hope the College of Surgeons will, in the interest of the profession and public, ordain that only fully qualified practitioners shall be recognised by it as lecturers.

THE UNIVERSITY OF LONDON AND MEDICAL WOMEN.

IN consequence of an application from Miss Edith Shove, requesting that she may be admitted to Degrees in Medicine under the "Act to remove restrictions on the granting of qualifications for registration under the Medical Act on the ground of sex" (39 & 40 Vict., cap. 41), the Senate of the University of London resolved, at a recent meeting, "That the opinion of the law officers of the Crown be taken (1) as to the nature and extent of the powers conferred on the University by the Act 39 & 40 Vict., cap. 41, and (2) on the question whether women, if admitted to degrees in medicine under that Act, will be entitled thereby to become members of Convocation."

THE CLINICAL SOCIETY.

THE Council of the Clinical Society has decided to appoint two special committees, one to inquire into the incubation period of scarlet fever, diphtheria, erysipelas, and typhoid fever; the other to ascertain what deleterious effects follow the prolonged and continuous use of chloral in ordinary doses. The gentlemen who have been requested to serve on these committees are: on the incubation period, Sir W. Jenner, Dr. Murchison, Dr. Cayley, Dr. Shirley Murphy, Dr. Broadbent, and Dr. Buchanan; on the action of chloral, Sir W. Jenner, Dr. John Harley, Dr. Ringer, Dr. Barlow, Dr. Andrew Clark, and Dr. Buzzard. The Society is to be congratulated both on its decision and on the selection of members made.

THE MEDICAL ACT.

ON Wednesday, at the Marlborough Police-court, Mr. Knox decided that a man practising in England with a foreign degree cannot be convicted under the Medical Act if he represents to the public that his qualification is foreign, or, in other words, if he does not pretend to hold one of the qualifications named in the schedule of the Act. On the 6th inst., at the Bradford Borough Police-court, a person holding a foreign qualification, and emblazoning the nature of his degree, was, nevertheless, convicted under the Act, and fined £10, with costs. These conflicting decisions under the same statute are so unfortunate that, in the interests of public justice, we cannot but hope the question will be at once raised before a higher tribunal with a view to final settlement.

THE SURGICAL AID SOCIETY.

THE proof that this useful Society did right to appeal to the Lord Mayor for support at its last annual meeting (the fourteenth) is found in the fact that Sir Thomas White had not even heard of the Society until he was asked to take the chair on its behalf. Publicity is essential to the success of this and kindred institutions; and in these days, when charity is so busy abroad, the benevolent should be reminded that the virtue ought to begin at home.

OPHTHALMIA IN WORKHOUSE SCHOOLS.

ON Tuesday last a meeting of the Liverpool Select Vestry was held for the purpose of considering the recent report of Dr. Monat and Mr. P. G. Smith, two inspectors of the Local Government Board, upon the condition of the Liverpool Industrial School at Kirkdale. The report in question could scarcely have been more sweeping in its condemnation of the school itself and of its management. Even the site is condemned, and the removal of the children to a building on another site is recommended as the only effectual remedy. The Select Vestry adopted a resolution, proposed by Mr. Wm. Rathbone, M.P., and seconded

by Dr. Williams, appointing a sub-committee to consider and report upon the matter. A proposal to give the committee power to take any action necessary for the winter was, however, negatived.

THE TREATMENT OF PSORIASIS.

ONE use appears at last to have been found for phosphorus, which, if confirmed by further experience, will make it a most useful medicine. Dr. Broadbent mentioned at the Clinical Society a case of psoriasis, in which, after other remedies had failed, he gave phosphorus, and in a week the disease, obstinate before, was cured. As Sir W. Jenner pithily observed, cases of psoriasis are plentiful, and phosphorus capsules to be had in abundance, and there should be no difficulty in inquiring into the action and use of phosphorus in this obstinate and ofttimes extremely troublesome disease.

THE annual meeting of the supporters of the Guest Hospital, Dudley, was held recently, when the fifth annual report of the institution was presented to the subscribers. The committee thankfully acknowledge the help received from the Earl of Dudley and others in the neighbourhood, and more especially the munificent donation of £2350 given by the family of the late A. B. Cochrane, Esq. The medical report showed that 430 patients had been admitted during the past year. Seventy-three operations were performed in that period, of which two only terminated fatally —very excellent results. In the early part of the year, several cases of erysipelas of a mild type occurred in the male wards, but thorough disinfection and fumigation appear to have eradicated the disease. There is ample evidence that the Guest Hospital is well managed, and is doing much good work.

AT the annual meeting of the Gynæcological Society of America, held lately, Dr. Storer of Boston read a paper "On the Importance of the Uterine Ebb as a Factor in Uterine Surgery." The author believed that there was an ebb and flow in the female body, which occurred regularly like the tides, and which should be observed carefully if the operator would have the greatest possible success attend his operations. Although he had performed serious surgical operations upon the pelvic organs during the catamenial period with success, he considered the best time for such operations would be about a week after the menstrual flow had ceased. At the same meeting, Dr. Emmett of New York read a paper "On Incision of the Cervix Uteri," in which an analysis was given of the treatment of 345 cases of different forms of flexure in Dr. Emmett's private hospital.

ON Wednesday a meeting was held in the Mansion House, under the presidency of the Lord Mayor, to make arrangements for the collection of the Hospital Sunday Fund next year. The council was reappointed, with the substitution of the names of Mr. Alderman Cotton, M.P., and Mr. G. A. Spottiswoode for those of the late Mr. George Moore and Mr. C. de Morgan, and that of Colonel Haygarth for Mr. J. A. Shaw Stewart, resigned. Upon the motion of Bishop Claughton, Sunday, the 17th June next, was fixed for Hospital Sunday in 1877, and the co-operation of all ministers of religion within the metropolitan area was again invited.

A DEATH from puerperal fever has again been recorded in Queen Charlotte's Lying-in Hospital, Marylebone-road. This makes the sixth death from the disease which has occurred in the institution since November last. In the face of the gravity of the circumstances, a thorough examination of the state of the wards should be immediately made.

WE observe that a somewhat novel view of the conditions favouring the causation and incidence of scarlet fever was enunciated lately at Kidderminster. The medical officer of health, in presenting his monthly report to the Town Council, states that there were fifteen deaths from the disease in the month, and then goes on to say: "An idea seems to have got about that this epidemic is produced by our sewers, or the smells arising from them. Now, such an idea, as any educated man will tell you, is utterly fallacious, and I believe it is a fact that nineteen out of every twenty persons, whether they live in a borough sewered like ours, in a town without sewers, in the country, or in the middle of a wood, have scarlet fever before they are twenty years of age." The medical officer of health cannot seriously maintain this latter contention.

WE regret to have to record the demise of Mr. William Harvey, F.R.C.S., of Soho-square, but latterly of 3, George-street, Hanover-square. The deceased gentleman was in his 70th year, having been born in 1806. He was surgeon to the Royal Dispensary for Diseases of the Ear for thirty years, and aural surgeon to the Great Northern Hospital since its foundation. Mr. Harvey's qualifications were obtained as follows: M.R.C.S. and L.S.A., 1830; F.R.C.S., 1853. He was also a Fellow of the Medico Chirurgical and Medical Societies, and was the author of numerous publications, a record of which will be found in the Medical Directory.

A SAD illustration of the destructiveness of diphtheria is reported by the Paris correspondent of the *Standard*. A whole family, consisting of father and mother and two children, were attacked with the disease, and carried off in a short time. Dr. Regnault, who attended them, became infected, and, in spite of the care of one of his medical colleagues, Dr. Biset, died also in twenty-four hours. Dr. Biset was then attacked, and expired after a very brief illness. The extraordinarily fatal nature of diphtheria at times was never more terribly exemplified.

BOARDS OF GUARDIANS continue to be exercised on the question of the supply of stimulants to paupers, and the matter appears to be susceptible of an infinite amount of discussion and treatment. In the parish of St. George's, Hanover-square, a return is being prepared which will show the cost of alcoholic stimulants consumed by the pauper inmates of the workhouses of the union during the six months ending Michaelmas 1875 and Michaelmas 1876 respectively.

WE understand that the Faculty of Physicians and Surgeons of Glasgow have lately established a lectureship on subjects connected with Medical Science. These subjects may lie within any part of the domain of the medical sciences, whether scientific or practical. The appointment of the lecturer is vested in the Council, to whom the fullest latitude is allowed in the way of selection. The sum of fifty guineas will be allowed as an honorarium to the lecturer.

Two members of the profession in Ireland have recently had conferred upon them the honour of knighthood. The recipients of the distinction are Dr. Owens, Mayor of Dublin, and Dr. W. Miller, of Derry, of which city he is, for the third year in succession, mayor. We congratulate these gentlemen on obtaining their well-earned rewards.

WE were much pleased on Saturday last to find that Sir William Fergusson was able to be present at the operations at King's College Hospital, and to hold the staff while his friend Mr. William Rose cut for stone.

IT is announced that proceedings will be taken against the managers of the Metropolitan Asylums Board by certain residents of Hampstead, in consequence of the establishment of the small-pox hospital, but that, having regard to the present epidemic of small-pox in the metropolis, an immediate injunction will not be sought. The legal process, however, has been issued.

THE mortality in London last week was at the rate of 22 per thousand annually. There were registered 1446 deaths, including 50 from small-pox, 24 from measles, 42 from scarlet fever, 8 from diphtheria, 28 from whooping-cough, 30 from different forms of fever, and 15 from diarrhœa. The three small-pox hospitals at Homerton, Stockwell, and Hampstead contained 586 patients on Saturday last.

MR. NORTH, medical officer of health for York, in his last quarterly report, presents a short history of seventeen cases of enteric fever which occurred in the city, many of them widely separated, and in different circumstances, in which the origin of their disease is clearly traced to the use of a well whose water had become polluted. The offending pump is now removed.

THE Town Council of Gateshead should take steps to improve the condition of the water-supply. It has been pronounced, after analysis, to be unfit for drinking purposes. Pending the introduction of a comprehensive measure to remedy the evil, all the water consumed should be boiled or filtered.

IT is intended to provide further hospital accommodation for cases of infectious disease at Fulham and Deptford, and tenders have been accepted by the Metropolitan Asylums Board for the erection of temporary buildings. The proposed pavilions will be adapted to receive in all about 400 patients.

NUMEROUS cases of spinal meningitis are reported from Port Elizabeth, Cape of Good Hope.

THE LONDON SMALL-POX EPIDEMIC AND THE WAY TO CONTROL IT.

THE last return of the Registrar-General showed that 50 deaths from small-pox were registered within registration London during the week ending the 9th instant—a number less by 17 than that returned in the preceding week. This reduction, however, in the weekly number of deaths from small-pox cannot be accepted as evidence of the decline of the epidemic, so long as the numbers of hospital cases continue to increase. The number of small-pox patients in the Metropolitan Asylum Hospitals in the week ending 28th October was 185, since which the weekly numbers have steadily increased to 585 on Saturday, 9th inst. A marked decline in the rate of increase in these hospital *cases*, however, during the last week under notice, is a satisfactory feature which should be noticed; but it would be unwise to rely upon it as a safe indication of an approaching decline in the prevalence of the epidemic. It really seems astounding that, in the face of this threatening epidemic, the Local Government Board should have made no serious attempt to organise any system for a return of the cases of small-pox occurring within the metropolis. It is evident from the Registrar-General's returns, that nearly half the deaths from small-pox occur in private dwellings, and it is equally evident that nearly the whole of the deaths have occurred among the class which is accustomed to receive attendance from Poor-law medical practitioners. A periodical return, therefore, of cases of small-pox occurring in Poor-law medical practice would afford, if not a complete, an invaluable source of information as to the progress of the epidemic. It would do much more than this; it would afford the means of securing early knowledge to the local sanitary authorities of those very cases in which the difficulties of securing isolation are greatest. Another important result of the collection of information as to small-pox cases would be that valuable light would be thrown upon the relative mortality of cases treated at home and in hospital. To carry into effect this report of cases of small-pox, it would only be necessary that the Local Government Board should direct Poor-law medical officers immediately to report, on prepaid post-cards supplied for the purpose, all new cases of small-pox occurring in their practice. Reasonable remuneration for this service should at the same time be authorised to the medical officers, the charge being distinctly recognised as a means for reducing the larger expenditure caused by the small-pox epidemic. A knowledge of all new cases of small-pox is indispensable in order to arrive at a trustworthy ultimate of the amount of hospital accommodation that will be required.

The exceptional fatality of small-pox in Hackney continues. During the four weeks ending the 9th inst., 25 per cent. of the deaths from small-pox in the metropolis occurred among the residents of this district, the population of which is less than 4 per cent. of the population of registration London. It is stated that the Metropolitan Asylum small-pox hospitals contained 163 patients from Hackney on Monday last, an increase of 40 upon the number a week previously. We lately pointed out the marked neglect of vaccination in Hackney shown by the most recent official returns; and it is satisfactory to hear that a Local Government Board inspector has been inquiring into the causes of this neglect, and has suggested the division of Hackney into two districts for vaccination purposes. It is unfortunate that this precaution was not taken previously to the outbreak of the present epidemic. A considerable increase of small-pox cases in East London is reported, especially in Bethnal-green, which till quite recently was almost free from cases.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council, held on Thursday last, after the transaction of the usual business, the minutes of the preceding extraordinary meeting were confirmed, the adoption of the amended Conjoint Scheme by the Council of the College being thereby finally established. The second report of the Committee on the regulations relating to the education and examination of candidates for the diploma of Fellow was adopted with a few minor alterations. The following gentlemen were elected members of the Board of Examiners in Anatomy and Physiology:—Messrs. Birkett, Savory, Holmes, Wood, Power, Hulke, Heath, Durham, and Pick. The Council accepted a marble bust of Mr. John Simon, which will be placed in the hall of the College. The medal recently awarded to Dr. Peacock for his large and valuable contribution to the museum of pathological specimens illustrative of diseases and malformations of the heart, was exhibited to the members of the Council. It was decided that the Hunterian Oration shall be delivered on the 13th instead of the 14th of February next.

PARIS.

(From our own Correspondent.)

DURING the last two weeks the typhoid fever epidemic has continued to abate in this city. From the reports of Dr. Worms, Physician to the Prefecture of Police, it appears that the number of deaths within that period has been about fifty per cent. less than during the preceding fortnight. This improvement is doubtless due to the lower temperature of the advancing season, and to the increased vigilance of the authorities with regard to sanitary regulations.

Referring to the clinical history of the disease, as it has been observed in Paris, I would remark that it has been distinguished, not alone by the absence of certain important

symptoms, but by the presence of others in anomalous and exaggerated forms.

The cutaneous phenomena have been especially prominent and peculiar. Thus, the eruption has usually appeared earlier than the seventh day; while the characteristic spots have been more numerous, larger in size, deeper in colour, and of longer duration than usual. Sometimes there has been but a single outbreak of these rose-coloured *taches*, which, having arranged themselves either in distinct or confluent forms, have disappeared only with the subsidence of the febrile attack; and, in other instances, successive crops of them have appeared, the one following the other so rapidly as to render the cutaneous surface the seat of phenomena of the most curious and conflicting character. Then, again, the eruption has been accompanied by veritable petechiæ, or has assumed a great variety of characters, especially that of purpuric or spotted fever. In fact, this resemblance has been so decided in a great number of cases as to justify the conclusion, either that typhoid fever and cerebro-spinal fever have a most intimate etiological relation, or that they have prevailed intercurrently in Paris during the last two months. When it is also remembered that intense cephalalgia, decided stiffness of the muscles of the neck, marked cutaneous sensibility and general neuralgic pains, together with an early disposition to coma, a strange absence of diarrhœa, an unprecedented rapidity of march, and an essential malignity of type have been the symptoms especially observed here in fatal cases, the connexion or coincidence claimed in this regard seems to be positively established. As a general rule, it has been observed that the cutaneous symptoms have not subsided with the fever, but have simply changed their character. Abscesses, boils, pustules, have usually been the legacy left to the period of convalescence. And yet, strange to say, notwithstanding these evidences of blood-poisoning and of depressed vitality, bed-sores have been infrequent, as Dr. Maurice Reynaud aptly observes in his lectures at Lariboisière.

Although, as before remarked, epistaxis has not been a prominent symptom, other hæmorrhages have been of common occurrence. In the service of Dr. Gallard, at La Pitié, fifty per cent. of the fatal cases have been marked by hæmorrhage, while among those which have terminated favourably the same symptom has presented itself in a number of instances. At the Hôpital Lariboisière hæmorrhage has also been a decided feature of the disease. Dr. Bourdon, physician at La Charité, in a very interesting paper, relating his experience of the epidemic, mentions hæmorrhage as one of the principal symptoms which he has been called upon to combat. This loss of blood has been from two sources especially—viz., the intestines and the lungs, showing that ulceration in the one and inflammatory action in the other have been prominent and controlling lesions in the disease. In a recent debate which occurred in the Société Médicale des Hôpitaux, this matter was specially referred to, and the opinion expressed by Drs. Férévol, Moutard-Martin, and Moissenet, that the phenomena, especially the hæmoptysis, were due to the employment of cold baths as therapeutic agents in the treatment of the disease. Dr. Maurice Reynaud, whose opinions on all that relates to the epidemic are received with great respect by his *confrères*, opposed this view of the subject with vehemence, and declared that, in his wards, a majority of the patients who had exhibited this symptom had not been subjected to treatment by cold baths at all. There can be no doubt, however, of the fact that a hæmorrhagic tendency has been one of the prominent features of the great epidemic by which this community has recently been visited.

Catarrhal symptoms have also played a leading *rôle* in the disease. An epidemic of *grippe* preceded, and prepared the way for that of typhoid fever. Many cases have commenced with a cough, and have subsequently presented symptoms of bronchitis and pneumonia. My distinguished *confrère*, Dr. Burdon, tells me that at La Charité "a large number of cases have been characterised by symptoms of pulmonary congestion, bronchitis, and pneumonia;" and such is the testimony of all who have been brought in contact with the epidemic. There have, in fact, been numerous examples of typhoid pneumonia—pulmonary inflammation and consolidation complicated with typhoid pneumonia—as the primary existence of cough, crepitation, expectoration, &c., has conclusively demonstrated. In a word, bronchitis and pneumonia have not only been identified in an unusual degree with the prevailing epidemic, but they have presented themselves at an earlier period and in more aggravated forms than under ordinary circumstances. It is a singular circumstance also that contemporaneously with the subsidence of typhoid fever, acute pulmonary affections have loomed up into prominence—as the mortality tables establish,—although the season has been one of comparative mildness and freedom from vicissitudes.

Nervous phenomena have likewise been conspicuous in the history of the epidemic. Fugitive pains, apparently rheumatic or neuralgic in their character, have been frequently encountered. An unusually strong tendency to coma has prevailed, while convulsions, both tonic and clonic, have repeatedly been observed. Prostration of the most profound and persistent nature has attended the *début*, and precipitated the result, of multitudes of cases. Reflex actions have presented themselves in an almost endless variety of strange and conflicting forms, so that the disease has been masked and its treatment complicated to an unparalleled extent. It is, however, in connexion with the circulation and the heat-producing process that the most important disturbances of the nervous system have been recorded; but, as this communication has already been too much extended, these matters, as well as the subject of the treatment adopted here for the control of the disease, must be postponed until another occasion.

Paris, Dec. 12th, 1876.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members, having passed the required examination for the Fellowship on the 23rd, 24th, and 25th ult., were, at a meeting of the Council held on the 14th inst., duly admitted Fellows of the College:—

Appleyard, John, M.B., L.R.C.P. Lond., Bradford, Yorks.
Davies, Francis Joseph, Newport, Monmouthshire.
Deakin, Charles W. S., L.S.A., H.M. Bengal Army.
Fisher, Frederick Richard, L.S.A., Grosvenor-street.
Jackson, George, L.R.C.P. Lond., Plymouth.
Macready, Jonathan Foster Christian Horace, Cheltenham.
Odell, William, L.S.A., Hertford.
Tyson, William Joseph, L.R.C.P. Lond., Folkestone.
Verdon, Henry Walter, L.S.A., Eccles, near Manchester.
Whittle, Edward George, M.B. Lond., Brighton.

One candidate passed in Surgery, and when qualified in Medicine will be admitted a Fellow; and four failed to satisfy the Court of Examiners, and were referred for twelve months' further professional study.

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent B.S. Examination for Honours:—

FIRST CLASS.

Pepper, Augustus Joseph (Scholarship and Gold Medal), Univ. Coll.
Duncan, Andrew, M.D. (Gold Medal), King's College.

SECOND CLASS.

Ottley, Walter, University College.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 7th:—

Bramwell, Ernest, Kendal, Westmoreland.
Parry, George Hales, Docking, Norfolk.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Alfred Hepburn, St. Bartholomew's Hospital; William Morris Satchell, St. George's Hospital; Thos. Edwin F. MacGeagh and William Ernest Good, University College.

ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.—The following examiners were appointed on the 30th ult., viz:—For the final examination for the licence: Drs. Charles Bell, A. H. Douglas, R. Paterson, A. Keiller, T. H. Pattison, D. R. Haldane, G. W. Balfour, James Struthers, R. P. Ritchie, Claud Muirhead, D. J. Brakenridge, Angus Macdonald, P. H. Watson, and Messrs. Thomas Annandale and Joseph Bell. For the first professional examination for the licence: Drs. Andrew Smart, John Wyllie, J. B. Tuke, A. J. Sinclair, J. O. Affleck, and Stevenson Macadam. For the certificate of qualification in public health: Drs. D. R. Haldane, A. D. Maclagan, H. D. Littlejohn, Arthur Mitchell, Stevenson Macadam, and Mr. William Lees, M.A.

DR. P. C. CAMPBELL, principal of Aberdeen University, died at his residence, Old Aberdeen, on Tuesday morning. He was appointed principal in 1855, and previously to that was Professor of Greek.

VACCINATION GRANTS.—The following gentlemen have received, from the Local Government Board, grants for efficient vaccination in their respective districts:—Dr. J. H. Scott, of the Newent Union, £6 8s; Mr. J. H. Hughes, Droitwich, £5 9s; Dr. La Fargue, of Godalming; Mr. F. Sutton, Willingham District, Gainsboro' Union, £2 8s. 8d; Mr. Beaven Rake, No. 2, District Fordingbridge Union, £9 9s (second gratuity).

DUBLIN PATHOLOGICAL SOCIETY.—The following office-bearers have been appointed for 1876-77:—President: Thomas Hayden. Vice-Presidents: John Banks, Dominic Corrigan, Samuel Gordon, Edward Hamilton, George H. Kidd, Robert M'Donnell. Council: A. H. Corley, Henry Gray Croly, G. F. Duffey, A. Foot, Henry Kennedy, James Little, Thomas Little, Alfred H. McClintock, B. G. MacDowel, John M. Purser, William Stokes, James H. Wharton. Secretary and Treasurer: E. H. Bennett. Secretary for Foreign Correspondence: Robert D. Lyons. Honorary Secretary: William Stokes.

BEQUESTS &c. TO MEDICAL CHARITIES.—Mr. William Baillie bequeathed his estate at Fallahill and half of the "residue" of his estate, of the estimated total value of upwards of £30,000, to the Edinburgh Royal Infirmary. Mr. George Moore, of Kensington Palace Gardens, bequeathed £500 and some shares to the Carlisle Infirmary, £1000 to the Whitehaven Infirmary, £1000 to the Silloth Convalescent Institution, and £500 to the Carlisle House of Recovery. Mr. Edward Tew, of Crofton, bequeathed £4000 to the Clayton Hospital and Wakefield General Dispensary. The East Suffolk and Ipswich Hospital has received £1000 under the will of the Rev. C. B. Elliot, of Tattingstone.

STATISTICAL SOCIETY.—The first monthly meeting of the present session was held at the Society's rooms in the quadrangle of King's College, Strand, and was numerously attended; the President, James Heywood, F.R.S., in the chair. After a long list of candidates had been unanimously elected Fellows of the Society, the President delivered his opening address, in the course of which he stated that the Howard Medal for 1876 (with £20) had been awarded to Dr. J. C. Steele, Medical Superintendent of Guy's Hospital. At the close of the address, the medal referred to was presented to Dr. Steele, and the subject of the essay for next year's medal was announced to be "On the Condition and Management—past and present—of the Workhouses and similar Pauper Institutions in England and Wales, and their effect on the Health, Intelligence, and Morals of the Inmates." Afterwards, Dr. F. G. Mouat, the Foreign Secretary, read a report on the International Statistical Congress, recently held at Budapest, to which several Fellows had been appointed delegates of the Society. The address and report spoken of will be published in due course in the Journal of the Society.

Medical Appointments.

ALLISON, A., M.D., L.R.C.S.Ed., has been appointed Medical Officer to the Shotts Ironworks, Loanhead, Edinburgh, vice Thorburn, resigned.

ALSTON, J. M., M.D., L.R.C.S.Ed., has been appointed Medical Officer to the Shotts Works, Arden, Lanarkshire, vice Torrance, deceased.

ARTHUR, H., M.D., M.B., C.M., has been appointed a Medical Officer for the Parish of New Monkland, Lanarkshire, vice Torrance, deceased.

BENNETT, W. H., has been appointed Surgical Registrar and Administrator of Anæsthetics at St. George's Hospital.

BOYS, A. H., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for No. 8 Sub-district of the Bedminster Rural Sanitary District.

BRADBURN, J. D., L.F.P.S., L.R.C.P., &c., has been appointed Medical Officer to Her Majesty's Government in the Island of Grenada, West Indies.

CARTER, A. H., M.D., M.R.C.P.L., has been appointed Physician to the Queen's Hospital, Birmingham, vice Mackey, resigned.

GRANGER, F. M., L.R.C.P.L., M.R.C.S.E., has been appointed House Surgeon to the General Infirmary, Chester, vice Chambers, resigned.

GWYNNE, G., L.R.C.S.I., has been appointed Medical Attendant to the Royal Irish Constabulary, Templemartin, co. Cork, vice Nason, resigned.

HART, N., M.B., has been appointed House Physician to St. Bartholomew's Hospital.

JAQUET, J. L., M.R.C.S.E., L.S.A.L., has been appointed House Surgeon to the Westminster Hospital, vice Poynder, whose appointment has expired.

JOULE, Mr. J. S., has been appointed a Resident Clinical Assistant to the Hospital for Consumption and Diseases of the Chest, Brompton, vice Best, whose appointment has expired.

LAUTON, H. A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Third District of the Poole Union, vice Philpots.

MACBEAN, R. B., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Cummertrees, Dumfriesshire, vice Ewart, deceased.

MORRISH, R. A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Castor District of the Peterborough Union, vice Brown, resigned.

MOXON, W., M.R.C.S.E., has been appointed House Surgeon to the Birmingham and Midland Free Hospital for Sick Children, vice Currie, resigned.

MURISON, J. F., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parishes of Sandsting and Walls, Shetland, vice Eaton, resigned.

QUICKE, W. J., L.S.A.L., has been appointed Resident Obstetric Assistant to the Westminster Hospital, vice Jaquet, whose appointment has expired.

RAYE, J. J. A., L.K.Q.C.P.I., L.R.C.S.I., L.S.A.L., has been appointed Medical Officer to the Lincoln United Friendly Societies' Dispensary, vice Wagstaffe, resigned.

ROBERTS, J. L., M.B., C.M., has been appointed Medical Officer of Health for the Ruthin Urban Sanitary District.

THOMPSON, E. T., L.K.Q.C.P.I., L.R.C.S.I., has been reappointed Medical Officer and Public Vaccinator for the No. 5 or Ashley District of the Drayton Union, Salop.

THURSFIELD, W. N., M.D., has been appointed Medical Officer of Health for the Brossley Urban Sanitary District.

TURNBULL, J. M., M.D., F.R.C.P.L., has been appointed a Consulting Physician to the Royal Infirmary, Liverpool, on resigning as Physician.

WHITMORE, W. T., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the St. George and St. James Dispensary, King-street, Golden-square, vice Scott, resigned.

WILLIAMS, R., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the No. 4 or Llanrug District of the Carnarvon Union, vice Jones.

Births, Marriages, and Deaths.

BIRTHS.

BOOKLESS.—On the 4th inst., at Wimbledon, the wife of James Pitcairn Bookless, M.D., of a daughter.

CHEADLE.—On the 9th inst., at Hyde-park-place, Cumberland-gate, the wife of W. B. Cheadle, M.D., of a son.

FENWICK.—On the 6th inst., at Chilton Hall, Perry-hill, the wife of J. C. J. Fenwick, M.D., of a daughter.

GRAHAM.—On the 6th inst., at Holmwood, Weybridge, the wife of Dr. Arthur Robert Graham, of a daughter.

MACNAMARA.—On the 5th inst., at Grosvenor-street, the wife of Charles Macnamara, F.R.C.S.E., of a daughter.

MACONACHIE.—On the 13th ult., at Malabar-hill, Bombay, the wife of Dr. G. A. Maconachie, Ophthalmic Surgeon, of a daughter.

MURPHY.—On the 4th inst., at Ayr-hill, Ramelton, the wife of George Wyndham Murphy, M.B., of a daughter.

PRINGLE.—On the 6th ult., at Meerut, N.W.P., the wife of R. Pringle, M.D., Surgeon-Major, Bengal Army, of a daughter.

MARRIAGES.

GRIFFITH—ROBERTS.—On the 5th inst., at Soar Chapel, Pen-y-groes, Carnarvon, by the Rev. C. Herber Evans, assisted by the Rev. J. Celsey Jones, John Thomas Griffith, Esq., L.R.C.P.Ed., of Lewyn Ous, to Laura Jane, youngest and only daughter of Owen Roberts, Esq., of Pen-y-groes.

MOIR—WOOD.—On the 6th inst., at the Parish Church, Bowdon, Cheshire, by the Rev. Canon Gore, Douglas Moir, M.D., of Burlington House, Manchester, to Mary Florence, fourth daughter of the late Edward Wood, Esq., of Green Bank, Bowdon.

SARJANT—BELL.—On the 28th ult., at the Parish Church, Wickham, by the Rev. R. Parker, Josiah John Sarjant, M.R.C.S., L.S.A., of the Cotonhill Institution for the Insane, Stafford, to Ellen, second daughter of Philip Bell, Esq., of Southsea and Wickham, Hants.

DEATHS.

CORBET.—On the 14th October, at Tauhaw, Auckland, New Zealand, Robert T. Corbet, M.D., formerly of Glasgow.

FORSAYETH.—On the 20th ult., at Templemore, Richard Martin Forsayeth, M.D., aged 68.

GAIRDNER.—On the 12th inst., at Northumberland-street, Edinburgh, John Gairdner, M.D., F.R.C.S.E., aged 86.

LITTLE.—On the 5th inst., at Sligo, William Swayne Little, M.B., aged 65.

PLUMBE.—On the 6th inst., at Maidenhead, Samuel Alderson Plumbe, M.D., aged 52.

PORTEOUS.—On the 8th inst., at Sutton-at-Hone, Surgeon-General H. W. Porteous, Madras Medical Department (Retired List), aged 65.

ROBINSON.—On the 20th ult., at Ditching, Sussex, Mark Anthony Robinson, M.R.C.S.E., aged 61.

SANDERSON.—On the 3rd inst., at Musselburgh, Henry Sanderson, Surgeon R.N., aged 83.

SWAYNE.—On the 9th inst., at Belgrave-road, Dublin, Edward Crawford Swayne, L.K.Q.C.P.I., aged 55.

WALKER.—On the 17th ult., at The Laurels, Crick, Cecilia, the very dearly-loved wife of T. Osborne Walker, M.R.C.S., L.S.A.L., F.O.S.L.

WROE.—On the 7th inst., at his residence, Irwell-place, Lower Broughton, Manchester, John Birch Wroe, M.R.C.S., in the 44th year of his age. Friends will please accept this intimation.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

DISEASES IN BATAVIA.

A NEW words on the sanitary condition of Batavia, whose cession to the Dutch by the British Government has often been regretted, gleaned from a recently issued Consular Report, may not be uninteresting. The prevailing and never absent sickness is fever, very seldom fatal among the Europeans and Chinese, who use quinine, but the cause of great mortality among the natives who have not the means to purchase the drug. Cholera has been so persistent, attacking all classes alike, that it is feared the disease has become endemic. It is the general opinion of the profession in the colony that it is not directly infectious or contagious. Epidemics of measles and whooping-cough had broken out among children, but not of great severity. Diphtheria, after having been epidemic, is subsiding. Small-pox is a comparatively rare disease. Vaccination is compulsory, and is said to be efficiently carried out by native doctors under Government supervision. No objection is offered to the measure by any class. Syphilis and venereal disease generally are very rife, notwithstanding compulsory registration and examination of prostitutes. The evil is attributed to the "almost entire want of morals" amongst the native population, and the lax manner in which the law is carried out. The disease, however, is not of a virulent type. There are two hospitals in Batavia; but no returns of admission and mortality are given, and it is intended shortly to erect a third hospital. The water-supply and drainage of the town are flagrantly defective. All excremental matter is thrown into the numerous canals which intersect the streets, and in these cattle, horses, and men bathe, and the water is used for all domestic, culinary, and drinking purposes. It is surprising the whole place is not swept away with disease. A comparison between the moral and material welfare of colonies and dependencies under the British Crown with those of other nations leads to convictions of which every Englishman may be proud.

Dr. Roussel's letter shall appear in our next impression.

CASE OF SPINA BIFIDA TREATED BY INJECTION WITH MORTON'S SOLUTION.

To the Editor of THE LANCET.

SIR,—On Feb. 9th, 1876, Mrs. C—— was delivered of a male child, which had spina bifida in the lumbar region; the skin over it was quite firm, and a cure was attempted by strapping and sheet-lead as a pad. This plan failed. I resolved to treat it by injection with the iodo-glycerine solution of Morton.

May 3rd.—Child now three months old; tumour larger and conical, having a circumference at the base of seven inches, and from base to apex a height of an inch and a half. I introduced a small trocar, drew off about four drachms of serous fluid, injected about one drachm of the solution, and sealed the small opening with a pledget of lint and collodion. The child was somewhat restless, and cried at times during the night, although there was very little fever. The tumour seemed to get more tense for a few days, and the walls more solid.

14th.—Tumour smaller. I drew off from half an ounce to six drachms of fluid, and repeated the injection.

21st.—Tumour smaller; feels solid at the base. I drew off about four drachms of fluid, and repeated the injection.

31st.—Tumour is much smaller; communication between it and the cord closed, for it cannot be emptied by pressure, and when the child cries there is no perceptible increase. I again drew off about four drachms of fluid, and re-injected the tumour.

July 20th.—The tumour is solidified, and has shrunk to about one-fourth of its original size. It will, I have no doubt, shrink more; but the cure may be said to be complete, as there is no communication between it and the membranes of the cord.

The child is of poor stamina, and is brought up with the bottle. This artificial feeding appears to upset its stomach every now and again, for it suffers periodically from vomiting and purging.

The child died from marasmus on the 29th of September. At the time of its death the skin was a little prominent over the seat of the tumour. The cure was, however, perfect.

Remarks.—This adds another to the number of cases cured by injection. The case was a favourable one for operation, with the exception of the child's stamina; but, in my opinion, the majority of cases suffering from this affection are children of low vitality. I see, on perusing Dr. Morton's case in your issue of Dec. 2nd, he did not withdraw any fluid; and in any future case I might have I should adopt the same plan, only seeking to solidify the contents, and allow the tumour to shrivel up, thus rendering repeated tappings unnecessary as well as ensuring more safety, the iodo-glycerine solution being less likely to come into immediate contact with the nerve-branches.

Yours obediently,

Wigan, December, 1876. WM. BERRY, M.R.C.S., &c.

M.B.—The following are the most suitable books for reading for Honors in Botany and Experimental Physics for the Preliminary Scientific at the London University:—Botany: Sach's Text-book of Botany (translated from the German); Henfrey's Botany (by Masters); Masters's Teratology; Lemaout and Decaisne's Botany (translated); Darwin's works on Plants; Berkeley's works on Fungology. Physics: Balfour Stewart's Heat; Maxwell's Theory of Heat; Deschanel's or Ganot's Physics; Maxwell's Electricity and Magnetism; Jenkins's Electricity.

Studens Histologia.—A Course of Practical Histology, by E. A. Schafer; published by Smith, Elder, and Co.

Dr. Urban Pritchard is thanked for his courtesy.

AN APPEAL.

IT is now some years since the British Medical Benevolent Fund appealed for support through the periodical press; but the existing depression, which this year seriously detracts from its means of aiding the distressed, has only too surely increased the needs of those who suffer, and it is trusted that this plea may find acceptance. The objects of the Fund are sufficiently well known. The details of its operation will be gladly forwarded to any inquirer by either of the Honorary Secretaries. It may be permitted, however, to state that, in addition to providing annuities for the aged, its distinguishing feature is the immediate relief, or re-establishment where practicable, of members of the profession in distress, and the aid of their widows and orphans in destitution, the necessities and desert of the applicants being their sole indispensable passports, and a careful scrutiny of these and a discouragement of improvidence the rule of action of the Committee. The means at the disposal of the Fund are grievously inadequate to meet the wants of the many distressing and deserving cases which are pressed upon it from all quarters; and the help of the profession is earnestly sought to support the Committee in their work, the executive for carrying out which is wholly honorary. It is further submitted that the good cause of a profession, ever ready to devote its best energies, regardless of self-sacrifice, to the service of all in poverty and sickness, may not inappropriately be advocated by its influential members with a generous laity, whose confidence they have so justly earned. The Treasurer of the Fund is Dr. Broadbent, 34, Seymour-street, Portman-square.

Pressus.—We very much regret that the length of our correspondent's communication is such that we have not the requisite space for its insertion.

Nemo.—The subject shall have our early consideration.

THE POWER OF DISPENSING AND CHARGING FOR MEDICINES.

To the Editor of THE LANCET.

SIR,—If you will kindly favour me with answers to the two questions below I shall feel greatly obliged.

1. Can a medical man, having the diplomas M.R.C.S.E. and L.R.C.P. Ed., dispense medicines for his own patients, or is he liable to prosecution by the Society of Apothecaries for dispensing medicines without being an apothecary?

2. Can he, under such circumstances, recover for the medicines supplied?

I remain, Sir, yours obediently,

November 20th, 1876. J. T. T.

*** The above questions in one form or another are frequently put to us by those who do not possess the qualification of the Society of Apothecaries. We can confidently assert that the Society will never institute or countenance legal proceedings against any registered medical practitioner on the ground of his dispensing medicines. His right to dispense medicines and his power to recover for medicines supplied are matters of a little more difficulty. We have been favoured through the courtesy of Mr. Bradford, the representative of the Apothecaries' Society in the General Medical Council, with the following opinions of Mr. Upton, the legal adviser of the Society, in answer to the first question:—"Can a medical man, having the diplomas M.R.C.S.E. and L.R.C.P. Ed., dispense medicines for his own patients, or is he liable to prosecution by the Society of Apothecaries for dispensing medicines without being an apothecary?" Mr. Upton says: "This would depend upon two circumstances: (a) Whether, as licentiate of the College of Physicians of Edinburgh, he was entitled to dispense medicines in Scotland; and (b) whether he had this qualification *registered here* (in England). If he were not entitled to dispense medicines in Scotland, or, *if*, being entitled to dispense medicines *there*, he did not register the qualification *here*, he would be undoubtedly liable to prosecution by the Society of Apothecaries." Second: "Can he, under such circumstances, recover for the medicines supplied?" The reply to this question turns exactly on the same points as are given in the answer to the first question. A licentiate of the College of Physicians of Edinburgh is entitled in Scotland to dispense his own medicines, though he is forbidden by the laws of the College, by himself, by co-partnery, or by servants, to keep a public apothecary's, druggist's, or chemist's shop, and does, indeed, by doing so forfeit all the rights and privileges he may so enjoy. In 1873 the College of Physicians of Edinburgh took counsel's opinion upon the question raised in our correspondent's letter. The opinion was that a licentiate of the College, duly registered as such, might dispense medicines in England, might sue in any Court for medicines so supplied by him, and would not be liable to a conviction under the Apothecaries Act for having supplied them. The College sought the opinion of counsel in consequence of a County Court Judge disallowing the charge of a licentiate of the College for medical attendance and medicines. It is very difficult to get County Court Judges of a certain age to perceive the modification of the bearings of the Apothecaries Act by the Medical Act. The right of licentiates of any of the Medical Corporations to charge the cost of medicines supplied under the Medical Act is to us as clear as day. At the same time, the moral of all these difficulties about charging for medicines is either not to charge for them, or to charge a nominal sum representing their cost to the practitioner, and make the substantial charges for attendance, advice, and professional service generally. This is in strict accordance at once with the Medical Act, with common sense, and with professional dignity. Though we still hold suitable medicines to be a very important part of the treatment of cases—never more valuable than now,—the supply of them is no essential part of the practitioner's duty.—ED. L.

SENATOR MANTEGAZZA.

No fewer than eight medical practitioners or professors have lately been promoted to seats in the Italian Senate. We have already remarked on the satisfaction felt throughout Italy at the bestowal of that honour on the Italianised German Professor Moleschott, of Turin. We have now to add that a similar feeling has been evoked by the addition of the same distinction to the many marks of his country's esteem possessed by Paolo Mantegazza. That accomplished physician has devoted himself heart and soul to the furtherance of State medicine, and to the diffusion of sound knowledge on the laws of health among his countrymen. Constantly at work in the experimental laboratory or by the bedside, he dedicates such leisure as these labours leave him to popularising the truths he has scientifically ascertained. He is master of a singular, clear, impressive, and winning style, and throws a charm round the least inviting subjects by the sheer spell of his fascinating prose. Every year he publishes an almanac devoted to one part of the human economy—the nervous system, the digestive apparatus, the organs of respiration being, among others, the topics of his facile and instructive pen. These publications, sold at a cheap rate, have an enormous circulation in Italy, and have been greatly instrumental in educating the public to a sense of what the State is bound to provide for—its health and general well-being. Mantegazza has written a classic treatise on the "Physiology of Pleasure," well worthy the attention of the profession at large. He has also devoted many papers to the food of the people, and is mainly responsible for the salutary introduction of cocoa among Italians. Only forty-three years of age, a long career of usefulness is before him, and Italy will have no reason to regret the addition to her Senate of one who has already given such ample proof of that best of all kinds of patriotism—the desire to see her intellectually enlightened and morally disciplined in the laws that regulate the organism, individual or social.

THE letter of *Mr. W. G. Gimson* (Witham) arrived too late for this week.

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

To the Editor of THE LANCET.

SIR,—You have frequently called attention to the difficulties that surround the medical officer of health in the performance of his duties. If things continue as they are, the position of such an officer will not only be, as it already is, useless and anomalous, but disagreeable and unenviable in the extreme. I do not speak at present of the unreasoning opposition and often ungentlemanly persecution to which he is exposed if he is faithful to the trusts reposed in him, or of the personal sacrifice he has to make of private practice from the inevitable offence of those with whose interests he has been forced to interfere. These are bad enough. But I draw special attention in your pages to the persecution and opposition which often proceed from those who should assist and forward all sanitary schemes, and encourage the efforts of the health officer. I refer particularly to conduct from which I am a personal sufferer. I was elected by the Board of Works as the medical officer of health in the room of my late partner. The district medical officer of the same parish unsuccessfully competed for the post. Since then he has endeavoured to impede my efforts to the best of his power. He refused me an inspection of the register of the health of the poor (which was required for the sanitary returns of the Board) for several weeks, and only delivered it up when compelled by the legal adviser of the Board. Then he refused to remove a patient to the hospital, though suffering from small-pox in a crowded locality, and in a house with eight other occupants. The hospital authorities will not receive patients unless under the certificate of the district officer, otherwise they have no guarantee that the expense of maintenance will be defrayed by the patient's parish. The medical officer of health, therefore, in such a case is entirely at the mercy of the district officer, which, to say the least, is not very tender when there is personal pique to gratify, and little concern for the public safety to restrain. It is necessary for the proper performance of his duties that the medical officer of health, whenever, as in my case, the "unholy alliance," as you have called it, between parochial and sanitary work is broken, should be able to act independently of the district officer, and to remove patients, who are willing to go, to the hospital, and have the use of the ambulance of the parish for the purpose (this was also refused in my case). If any really useful work is to be done by the sanitary schemes of the country, the medical officer of health should be invested with more power, and not be a helpless spectator, or, if he likes to waste his time and trouble, a disregarded declaimer in a time of need. A magistrate recently granted an order for the removal of an unwilling patient to hospital; but he refused to carry it out, and nothing could be done. A remonstrance was made regarding it, and sent to the Home Office; but it was tied up in red tape, and is now probably getting dusty on some lawyer's shelf. How long are we to wait?

I am, Sir, yours &c.,

November 21st, 1876. M. O. H.

Mr. Thomas Horsley.—The reference should have been to THE LANCET of March 15th, 1873. Our correspondent would get valuable information by writing for copies of the Reports of the Provident Dispensaries of Northampton, Coventry, Leicester, &c. The Secretaries are always courteous, and glad to further the provident principle.

A QUERY.

To the Editor of THE LANCET.

SIR,—Can any of your numerous readers inform me what is the best remedy (if any) for speedily removing the "copper-coloured" stains of a syphilitic rash, extending over the anterior surface of the chest and armpits. The disease was contracted over two years ago, and now nothing remains of it but the stains I speak of. My patient is a gentleman, about to be married, and is, of course, anxious to get rid of them. I have tried mercurials (internally and externally), iodide of potassium, and Turkish baths, but with no perceptible result. If anyone can give me a few hints I should be much obliged.

Yours sincerely,

Dec. 6th, 1876. W. E. P.

CHEMICAL ANALYSES IN INDIA.

THE Report of the Chemical Analyser to the Bombay Government for the year 1875-6 has been published. During the year 366 medico-legal cases, involving the separate examination or analysis of 950 articles, were sent in for opinion and report. Analyses of articles other than those connected with medico-legal cases were also made to the number of 434, making in all 1393 examinations carried out by the chemical expert. The report is drawn up with much care, and contains some interesting information, particular parts of which can now only be summarised. Under the head of Blood-stains we find that 20 cases of this class were reported on, in 18 of which mammalian blood was detected. 116 cases of blood-poisoning were submitted, poison being detected in 88 instances, the agent generally being arsenious oxide. An enormous amount of human poisoning evidently goes on in India, the substances employed being arsenic, opium, datura, powdered glass, lead, mercury, silver, copper, sulphate of iron, &c. Fortunately a very large proportion recover. No less than 170 samples of potable water were examined.

Sanitas should obtain the Public Health Acts. See also our columns for this week.

POISONING BY CARBOLIC ACID; RECOVERY.

To the Editor of THE LANCET.

SIR,—At the recent inquest at Hampstead Small-pox Hospital it appears that the deceased swallowed an ounce of carbolic acid, and died from its effects. It would be interesting to know what remedies, if any, were administered.

Some time since I was asked to visit a workman at the Lying-in Hospital in Endell-street, who had swallowed some carbolic acid, which was placed in a breakfast-cup in the kitchen for the purpose of disinfecting, the drains at that time being open. It appears that the man was under the influence of drink, and went into the kitchen, and seeing what he thought was beer in the cup, drank from it, and immediately became ill. In the course of a few minutes I administered carbonate of soda and chalk, as thick as cream, pouring as much as I could get down his throat. As he rapidly became insensible, the ladies of the hospital in the meantime having mixed eggs and milk with oil, it was also given until we could get no more down. He was then perfectly comatose, pulseless, and very cold. Mr. Bennett, the then surgeon to St. Giles's Infirmary, kindly admitted him at our request, and, as he was supposed to be dying, his wife was sent for. However, he rallied after a time, and made an excellent recovery, and the only treatment after his admission was oil and milk. To show the gratitude of the patient, I may mention that when he was discharged his first visit was to the hospital to threaten an action for leaving the carbolic acid in his reach.

I think this a most interesting case, and one showing that prompt attention may save, although it is stated that there is no remedy for carbolic acid poisoning. I think in this case that the facts clearly prove there is an antidote if quickly given.

Your obedient servant,

December, 1876. WM. FAULKNER, M.R.C.S.

M.D. Edin.—A qualification in Midwifery we can understand as implying that the licence-holder is possessed of the knowledge requisite to enable him to attend a case of midwifery; in other words, to act as a midwife. The treatment of "diseases of women and children" is a purely medical function, and requires a Medical licence.

Fair Play's inquiry is a most proper one. It is not easy to lay down a dogmatic rule. Where circumstances are really good, a charge should be made. In any circumstances, prescriptions should be written, and medicines should not be dispensed.

Mr. H. Stephens.—Consult a qualified surgeon.

TREATMENT OF COMPOUND FRACTURE WITH TINCTURE OF BENZOIN.

To the Editor of THE LANCET.

SIR,—I read Mr. Bryant's cases in your issue of Dec. 2nd with some interest, not knowing the treatment was considered novel. I think Mr. Bryant will find tincture of myrrh has precisely the same effect. Twenty years ago this was used in the same manner at the Southern Hospital, Liverpool, and with splendid results. Ever since I have adopted the plan, and in favourable cases applied starch bandages at once; in fact, treated the cases as simple fractures from the beginning. Friends have expressed surprise at the success of this method.

I am, Sir, yours truly,

E. C. GARLAND,
House-Surgeon to the Southern Hospital,
Yeovil, December, 1876. Liverpool, in 1857.

QUALIFICATIONS OF FACTORY SURGEONS.

M.R.C.S.—The L.S.A. is sufficiently qualified to hold the appointment of factory surgeon. The law requires that every certifying surgeon should be actually practising medicine or surgery, and duly registered under the Medical Act.

Country Doctor.—Two tablespoonfuls.

MILITIA SURGEONS.

To the Editor of THE LANCET.

SIR,—Permit me to remind those surgeons who have not sent in their returns that it will be impossible for the Committee to make out a correct statement to lay before the Secretary for War, should they not comply with the resolution passed at the general meeting. At present only one-half the number of forms have been returned, and it must be obvious that unless we are *all* of one mind in assisting in getting up as complete a case as possible, our cause will fail in obtaining that outside support to which it is entitled. We have many promises from M.P.s, and, I trust, with a good case to lay before them, the support of very many more. Isolated attacks on the authorities have hitherto only led to slaughter in detail. Therefore in this, which is probably our last advance, "let us move forward shoulder to shoulder."

Your obedient servant,

December 11th, 1876. MEMBER OF M.S.S.

TEST FOR BILE.

M. MARÉCHAL'S test for bile has lately been recommended by Dr. Smith, jun., of Dublin, who considers it vastly superior to Gmelin's nitric acid test. M. Maréchal uses the tincture of iodine, which produces a beautiful green, passing from rose to yellow. Dr. Smith believes that no other pigment but bile will give this peculiar green colouration.

Rev. J. W. A. Taylor.—A Montreal degree is not recognised in England—that is to say, it is not registerable.

TREATMENT OF COLLIQUATIVE DIARRHŒA.

To the Editor of THE LANCET.

SIR,—The few terse remarks which appeared in your impression of last week on the treatment of colliquative diarrhœa, and which Dr. Bonfigli designates "vaso-paralytic," appear to me to be provocative of further comment, and they also bring to my remembrance certain facts, pertinent and worthy of mention; so, if not occupying too much space, I should like to make some cursory observations on the subject.

Now, let the disease be what it will (it stands to reason that any organic derangement and phthisis must necessarily be excluded), diarrhœa more or less precedes death. It does not signify from what disease the diarrhœa may arise (leaving out of consideration the above-mentioned one), it *will* make its appearance in some form or other, and let any astringent be administered, it is practically not of the slightest use in the majority of cases. I do not intend to insist that diarrhœa has *never* been completely stopped by an astringent, and that it is not amenable to such kind of treatment, for there are too many examples showing the contrary; but I am almost sure that those cases of diarrhœa which *are* amenable to astringents are in the minority; being so, I think the best treatment to pursue is to give a purgative to eliminate *that* which nature is endeavouring to eject. For nature, somehow or other, must get rid of an evil which is irritating her; and if we prevent her from so acting, she will most tenaciously strive to do so till at last the system, which is already considerably weakened by the disease, the drain which is perpetually going on, and the continual straining of the intestinal tract to get rid of *that* which has now become almost a foreign substance, and, in my opinion, the real cause of the diarrhœa, she at last gives up the resistance and succumbs, overpowered by our persistence in thwarting her designs. Dr. Bonfigli, being anxious to stop such diarrhœa, was induced to try the chlorate of potash, and found that he was just able to keep it in check only so long as the drug was given, which is tantamount to confessing that his experiments were not exactly what one would call successful.

Now, it would be highly satisfactory to be made acquainted with the answers to the following questions:—What kind of stools were passed previous to the administration of the drug and during the administration? What colour were they? Of what ages were his patients? From what diseases were they suffering? These questions are not put pragmatically and disputatingly, but simply to inquire whether the administration of the potash was appropriate in all cases; for we well know that what may be beneficial to one may not be to another, if we take into consideration individual idiosyncrasy. Was it advisable giving it in order to stop that which nature was endeavouring to rid herself of? and did it act as a complete preventive? For I often think that a great number of patients succumb, not altogether to the disease, but to our obstinate persistence in trying to stop the diarrhœa, and the following is a great argument in my favour.

Nearly all the post-mortems which I attended at the hospital, and they were far from being few, I noticed that the lower part of the intestines were generally, and I may almost say completely, plugged up with most offensive fæces, stretching from the rectum, or from the sigmoid flexure, to the termination, and sometimes to the commencement of the transverse colon; and I remember remarking to myself that such a condition could not be otherwise than prejudicial to life, and at the same time thought it strange that no note or comment should be made on the same; and the idea occurred to me that during life the patients *might* have been benefited by a purgative instead of an astringent, for in many of these cases I was cognisant of the administration of an astringent just previous to death, for I remember well that they had what is technically termed colliquative diarrhœa.

I do not mean to infer from the foregoing that life would have been saved, but a purgative might possibly have prolonged it; for, to use a similitude, you do not weaken a man by relieving him of a load, however light it may be, even supposing the patient was in a sinking condition.

The preceding, I think, shows the advisability of not giving astringents of any description whatever; for by thwarting nature we may hasten death.

Bearing all this in mind, I think using potash, according to Dr. Bonfigli's theory, is prejudicial rather than beneficial.

I am, Sir, yours obediently,
Camberwell-road, Dec. 1876. E. M. BODDY, F.R.C.S., &c.

PLACENTA PREVIA.

To the Editor of THE LANCET.

SIR,—In a "Report of a Case of Placenta Prævia," published in your columns on the 19th of August last, the author, Mr. Alderson, makes the following remarks: "The entire placenta was very easily detached, and was expelled during a feeble pain with very little assistance on my part; indeed, had the head presented instead of the arm, I think labour might have been completed by nature, by the expulsion of the placenta first, and the child quickly following." These remarks lead me to think that the following case might be interesting.

When I was a student, at a time when my experience in midwifery was very limited, I was called to attend the following case. On arriving I found the woman losing a large quantity of blood, and she informed me that this had also occurred several times during the previous few weeks. On examining, I found the os widely dilated, and an irregular pulpy body presenting. I sent immediately for assistance; but before this arrived, the woman, who had got out of bed, and was sitting on the chamber utensil, suddenly felt something come down. I found, on examining again, that the placenta had been expelled. The bleeding now entirely stopped, and in a short time the child was born without any assistance, the head presenting. The child was, of course, dead.

I am sorry that I am obliged to give the above meagre details from memory, as I have not the notes of the case by me at present.

Yours &c.,
Carnarvon, Cape Colony, Oct. 21st, 1876. A. HARDING.

Lobular Pneumonia.—The use of the title is false and fraudulent; and if the evidence of it is good, the person could be prosecuted under the Medical Act.

Omicron.—Certainly so, if there is nothing in the rules of the hospital to the contrary, and if he is duly registered.

M.B.—We are not able to answer our correspondent's question.

THE INDIAN MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—The letters from "A Regimental Surgeon" (India) and from "An Indian Army Surgeon," which appeared in your issue of December 2nd, are worthy of the attention of intending candidates for that service.

I can quite corroborate what the former writer says as to the popularity of that service, resting upon what it was rather than on what it is. From fifteen to twenty years ago, when I was in India, the Indian medical officer was comparatively well off. He had a fixed tenure of appointments, a considerable income in addition to his military pay by civil and other appointments, and by private practice &c. He was, except in time of war, seldom moved. His living expenses were far lower than now, and it was possible for him to put by some money to supplement his pension. To do so now is almost impossible. If he breaks down in health he is now sent home, and put on English or furlough pay, instead of going to the hills, the Cape, or Australia, on Indian pay and allowances, for two years. But, lastly, the Medical Funds have been abolished. In 1863 and '64, I recollect talking over the matter with an old Indian officer, and I learned how the Indian surgeon who failed in health, if he could only serve for the first or lowest pension, could retire and *save his life* on, I think, £100 per annum after fifteen years' service in India; he had only to continue paying his subscriptions to the Medical Fund, and sooner or later, after twenty years' connexion with that Fund, he would be allotted £300 per annum, which, added to his military pension, made him comfortable. By doing away with the Funds, the possibility of retiring on the lowest military pension was removed, and men now either die or starve. Let anyone take up an old list of Indian medical officers under the system that has lately ruled, and he will find that but a small percentage survive. By doing away with the Fund pensions, medical officers are entirely at the mercy of the Government, and are compelled to serve on and die at their posts, as they cannot live on the pension. Actuaries, no doubt, made it apparent to Government that dead men were cheaper than pensioners.

I remain, Sir, yours &c.,
December, 1876. OLD ARMY SURGEON.

Enquirer.—The charge would be quite reasonable. The lady's present position has no retrospective bearing.

M. O. H.—Every information may be obtained on application either to Professor Humphry or Dr. Paget, Cambridge University.

METHOD OF TESTING URINE FOR ALBUMEN.

To the Editor of THE LANCET.

SIR,—The following will be found to be a handy and exact method for testing urine for albumen.

Take a thin glass microscopical cover (about one inch square is the best size); on this place a drop or two of the urine to be tested; then with a pair of ordinary dressing forceps hold the cover over the flame of a candle. At the same time the under surface of the glass will be blacked by the smoke, and the urine will be boiled. If there is any albumen, the black under surface renders the white precipitate evident.

Urine may also be tested cold with nitric acid with the same apparatus. A drop or two of the urine should be placed slightly on one side of the centre of the surface of the glass, and a drop of nitric acid on the other. By inclining the glass, the two will mix, and after the fumes which result from the mixture have passed away, it will be readily seen if there is any albumen precipitated.

In the first experiment care must be taken not to boil the urine too rapidly, or it will be evaporated. In the second, the resulting precipitate is rendered more apparent if the under surface of the glass has been previously coated with Brunswick black or some other dark substance. A few of these covers can be carried in an ordinary pocket dressing-case, and afford a ready means of testing urine at the patient's house.

If a method of securing nitric acid in a bottle in such a manner that it could be carried about without leaking could be found, a handy pocket-case, carrying a few of these covers, together with the acid, might be serviceable to those who prefer the cold method of testing for albumen.

I remain, Sir, yours &c.,
December, 1876. W. HENRY KESTEVEN.

DRAWINGS BY SIR CHARLES BELL.

To the Editor of THE LANCET.

SIR,—It may be information for you to be made acquainted with the fact that there are in drawers or folios in the museum of University College, London, some very fine coloured drawings by Sir Chas. Bell; surgical cases chiefly. Whilst writing, I seem to have a vivid recollection of one in particular—viz., that which shows the muscles of a tiger's head. I have often gazed with admiration upon these beautiful drawings. I wonder whether the light of day ever shines upon them?

I am, Sir, your obedient servant,
Harrington-square, Regent's-park, Dec. 11th, 1876. H. B. TUSON.

THE ACTION OF ERGOT IN TEDIOUS LABOUR.

To the Editor of THE LANCET.

SIR,—In attending a great number of midwifery cases every year, I am gradually coming to the conclusion that ergot, as to its effects in producing contraction of the uterus, and hastening on tedious labour, is a much overrated drug; nay, I am of opinion that it often acts in an exactly opposite manner. Would it be encroaching too much on your valuable space if I were to ask for the experience of my brother practitioners on this subject?

Your obedient servant,
London, Nov. 29th, 1876. L.R.C.P.

*** While inserting our correspondent's letter, we do not share his doubts about the power of ergot to quicken the action of a languid uterus in tedious labour. We believe it to be one of the best established facts in therapeutics.—ED. L.

COMMUNICATIONS, LETTERS, &c., have been received from — Sir W. Jenner, London; Sir William Fergusson, London; Sir H. Thompson, London; Sir J. Paget, London; Sir G. Burrows, London; Dr. G. Johnson, London; Mr. H. Smith, London; Dr. Wilson Fox, London; Dr. Pollock, London; Dr. G. Harley, London; Mr. T. Holmes, London; Dr. Southey, London; Mr. John Wood, London; Dr. Ringer, London; Mr. Erichsen, London; Dr. Grailly Hewitt, London; Mr. Savory, London; Dr. M. Mackenzie, London; Mr. Bryant, London; Dr. B. Hicks, London; Mr. Critchett, London; Dr. Handfield Jones, London; Mr. Spencer Wells, London; Dr. Greenhow, London; Mr. F. Mason, London; Dr. H. Fagge, London; Mr. J. Gay, London; Dr. Tilbury Fox, London; Dr. Bastian, London; Dr. Greenhalgh, London; Mr. J. R. Lane, London; Dr. Macnamara, London; Dr. Hughlings Jackson, London; Mr. G. Lawson, London; Mr. A. Durham, London; Dr. Habershon, London; Dr. Sydney Jones, London; Mr. Wagstaffe, London; Dr. Down, London; Dr. Brunton, London; Mr. Croft, London; Dr. Fagge, London; Dr. Buzzard, London; Dr. Broadbent, London; Dr. Ferrier, London; Dr. T. Chambers, London; Dr. Poore, London; Dr. Wiltshire, London; Prof. Anderson, Glasgow; Mr. Maunder, London; Prof. Macleod, Glasgow; Mr. T. P. Teale, Leeds; Dr. Lloyd Roberts, Manchester; Dr. Greenfield, London; Mr. Gamgee, Manchester; Dr. B. Foster, Birmingham; Dr. Buchanan, Glasgow; Mr. Solomon, Birmingham; Mr. Nunneley, Leeds; Dr. A. Robertson, Edinburgh; Dr. Fergus, Glasgow; Mr. Bulteel, Devonport; Mr. Hunt, London; Mr. Stephens, Chesterfield; Mr. Pritchard, London; Mr. Gibb, Newcastle; Dr. F. W. Pavy, London; Lieut.-General Bourchier, Brighton; Mr. Prideaux, London; Mr. Walker, Spondon; Dr. Philipson, Newcastle; Mr. Anson, London; Mr. Wilders, Birmingham; Dr. Hitchcock, Lewisham; Mr. Howley, St. John's, Newfoundland; Dr. Cheadle, London; Mr. Ensor, Port Elizabeth; Mr. Bradley, Manchester; Dr. Allbutt, Leeds; Mr. Jordan, Birmingham; Dr. Duncan, Edinburgh; Dr. Reeves, London; Mr. Cory, London; Dr. Gairdner, Edinburgh; Mr. Ransome, Bowdon; Dr. Savage, London; Mr. Major, Wakefield; Dr. Woodman, Worcester; Dr. E. D. Powell, London; Dr. Millar, Hoxton; Mr. S. Smith, Clifton; Dr. Croly, Dublin; Dr. E. L. Fox, Clifton; Dr. Edis, London; Dr. Paget, Cambridge; Dr. Bowring, Manchester; Dr. Stewart, Edinburgh; Dr. Sturges, London; Mr. Rayner, Hanwell; Mr. Parker, Liverpool; Mr. Inglis, Edinburgh; Dr. Gervis, London; Mr. Carter, London; Dr. Fenwick, London; Mr. J. D. Mann, London; Mr. Maskern, London; Mr. Davy, London; Dr. Wyckoff, Brooklyn, U.S.A.; Mr. Allen, London; Mr. Clay, Birmingham; Mr. Kesteven; Mr. R. Harrison, Liverpool; Dr. Tibbits, Bradford; Mr. Husband, Stroud-green; Messrs. Chambers, Edinburgh; Mr. Jenkins, Bridgend; Mr. Reid, Stafford; Dr. Declats, Paris; Messrs. Clin and Co., Paris; Dr. Cleland, Galway; Dr. Nankivell, Rochester; Dr. Roberts, London; Dr. Balfour, Edinburgh; Dr. Taylor, London; Mr. Boddy, London; Mr. Faulkner, London; Dr. Davidson, Liverpool; Mr. Lucas, London; Dr. Foster, Cambridge; Dr. Morgan, Manchester; Dr. Shelton, Kentucky, U.S.A.; Mr. J. B. Austin, London; Dr. Allchin, London; Mr. Lammeman, Tunbridge Wells; Dr. J. P. Irvine, London; Dr. Roussel, London; Dr. Barnett, Dublin; Dr. Leishman, Glasgow; Mr. Hill, London; Dr. Wadham, London; Mr. Rothenheim, London; Mr. Gimson, Witham; Messrs. Cassell, Petter, and Galpin; Mr. Barton, Wrexham; Rev. C. Lea, Sapey Bridge; Messrs. Moses and Son, London; Mr. Woodcock, Bradford; Mr. Tuson, London; Mr. Moore, Brixton; Mr. Jugpen, Putney; Mr. Bradbury, Cambridge; Mr. Cooly, Staunton; Mr. Peck, Yalding; Messrs. McGee and Co., Belfast; Dr. Spencer, Clifton; Mr. Annandale, Edinburgh; Dr. W. H. Dickinson, London; Mr. Morrant Baker, London; Mr. Travers, Dublin; Mr. Higgens, London; Dr. Charteris, Glasgow; Dr. Wood Smith, Glasgow; Dr. Roscoe, Manchester; Mr. Case, Hampstead; Mr. Wheeler, Manchester; Mr. Rake, Fordingbridge; Mr. Rutter, Accrington; Mr. Hide; Mr. A. Borgett; Mr. Salmon; Dr. Cargill, Jamaica; Dr. Ritchie, Otley; Dr. Calman, Greenock; Mr. Smith; Dr. Tatham, Salford; Mr. R. Coram; Mr. Peake; Mrs. Longhead, Merville; Mr. C. H. Roberts, Salisbury; Mr. Davenport; Mr. White; Dr. Webber; Mr. Ede; Dr. Bucknill; Dr. Rabagliati, Bradford; Dr. Farquhar, Pudsey; Dr. Lawton, Poole; Mr. Maclure; Mr. Binns, Middlesborough; Dr. Balfour; Dr. Church; Mr. Angove, Great Yarmouth; Mr. Wright; Dr. McCalman, Greenock; Mr. Rintoul; Mr. Russell, Leith; Dr. Laffan, Cashel; Secretary of the Glasgow Pathological and Clinical Society; The Registrar-General of Edinburgh; A. C.; N. N. T., Edinburgh; M. D., Wandsworth; Vaccine Lymph; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Dr. Redwood, Rhymney; Mr. Mathews, Whitehaven; Dr. Moir, Bowden; Mr. Le Page, Brandon; Mr. Greenwood, Liverpool; Mr. Jones, Manchester; Mr. Miles, Northallerton; Dr. Dawson, Hunmanby; Mr. Cripps, Haslingden; Mr. Stork, Bristol; Dr. Quinton, Newark; Mr. Fosbrook, Birmingham; Mr. Hyde, Stonehouse; Mrs. Mackey, Southampton; Mr. Chambers; Mr. Hill; Mr. Clayton, Accrington; Dr. Holmes, Herley; Mr. Arnott; Dr. Evans, Aberdare; Dr. Griffith, Carnarvon; Dr. Nicholls, Hingham; Mr. Hale, Barrow Hill; Mr. Borthwick; Dr. Maconachie, Bombay; Mr. Attwater, Whickham; Dr. Walker, Rugby; Mr. Hamerton, Burton-on-Trent; Dr. Yelf, Moreton-in-Marsh; J. W. A., Burnley; Surgeon, Rochdale; J. L.; Assistant, Dover; R. P., Eastbourne; A. B., London; E. C., Bedford; M. N., Appleby; S. M. E.; Delta, Sheffield; A., Bradford; J. B., Manchester; Box, Huddersfield; Physician, Abergavenny; Delta, Broxley; Medicus, Newcross; S. C. E., Brighton; M. B., Newcastle; M.R.C.S., Shrewsbury; Medicus, Haslingden; Beta, Coleford; Medicus, Peckham; J. W., Glasgow; E. B.; Medicus, Ipswich; B.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, DEC. 14TH, 1876.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb.	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp	Rain-fall.	Remarks at 8 A.M.
Dec. 8	29·48	N.E.	47	49	...	50	47	0·41	Overcast
,, 9	30·13	N.W.	39	40	...	49	38	...	Hazy
,, 10	30·23	N.W.	44	47	...	48	38	...	Overcast
,, 11	30·14	N.W.	42	46	...	48	43	...	Foggy
,, 12	29·79	S.W.	43	44	...	49	43	...	Overcast
,, 13	29·84	W.	37	39	...	48	36	0·18	Overcast
,, 14	29·93	S.	42	44	...	46	37	...	Foggy

Medical Diary for the ensuing Week.

Monday, Dec. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Mr. J. Astley Bloxam: A Man (Case of Lupus) on whom the Indian Operation for making a new Nose has been performed. — Dr. Broadbent, "On Warburg's Tincture," with Therapeutical Comments.

Tuesday, Dec. 19.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Sequel to a Case of Tumour of Sciatic Nerve; Biliary Calculi Encysted in Peritoneal Adhesions; Aneurism of Aorta; Spontaneously Fractured Vesical Calculi; Valvular Disease of Heart; Recovery from Pyopericardium; Adenoma Hepatis (two cases); Xanthelasma; Mitral Disease; Cerebral Aneurism from Embolism; Cerebral Tumour; &c. &c.

Wednesday, Dec. 20.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY. — Ethical Evening.—7½ P.M. Council.—8½ P.M. Mr. Hamilton Cartwright, "On the Position of Dental Surgery in its Social and Ethical Aspects."

Thursday, Dec. 21.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HARVEIAN SOCIETY.—8 P.M. Second Harveian Lecture: Mr. James Lane, "On Syphilis."

Friday, Dec. 22.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Ordinary Meeting.

Saturday, Dec. 23.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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